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Finanční analýza vybrané společnosti
Financial Analysis of Selected Company

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1. Introduction
2. Description of the Financial Analysis Methodology
3. Financial Characteristics of Selected Company
4. Financial Analysis of Selected Company
5. Conclusion

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References:

BREALY, R. A., S. C. MYERS and F. ALLEN. *Principles of Corporate Finance.* 9th ed. New York: McGraw-Hill, 2008. 978 p. ISBN 978-007126327-6.
EHRHARDT, Michael C. and Eugene F. BRIGHAM. *Corporate Finance.* 4th ed. New York: South-Western College, 2010. 848 p. ISBN 978-1439078082.
HARRISON, W. T., Ch. T. HORNGREN and B. THOMAS. *Financial Accouting.* 8th ed. New York: Prentice Hall, 2009. 960 p. ISBN 978-0136108863.

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Contents:

1 INTRODUCTION

Financial analysis have a most basic function is use a mount of data, after calculate and analyze, we can avoid the wrong decision takes the uncertainty for the company. The financial analysis is start with the financial statement. All the statement is coming from the public information. So the first thing is understand the financial statement.

The goal of this thesis is analyze financial health of Urban Construction from 2009 to 2013.

And we focus on financial analysis to analyze the Urban Construction Company in recent 5 years. The recent 5 year in this thesis is from 2009 to 2013. And this thesis use two methods by common-size analysis and financial ratio analysis from 2009 to 2013.

This thesis is divided by 5 chapters. First chapter is introduction about whole this thesis. Second chapter is description of the financial analysis. Third chapter is introduction of Urban Construction company. Fourth chapter is all calculations and analysis. Last chapter will be conclusion.

In chapter two we introduce all three financial statement and the methods. At first we describe three financial statement. It is the balance sheet, the income statement and the cash flow statement. As we introduce before, for understand the financial analysis you need to understand financial statement first. This be easier for us to understand this thesis and financial analysis. Then we describe two types of analysis. First one is common-size analysis. Common-size analysis is divided by two type: vertical common-size analysis and horizontal common-size analysis. At the end we introduce the most important financial ratio. It is also the second type of analysis. It have five different ratio type which is profit-abilities ratio, liquidity ratios, solvency ratios, activity ratios and DuPont analysis.

In chapter three we introduce the selected company Xinjiang Urban Construction. At first is the company's basic business, competitor, risk and history. Then we find the financial statement from this company from 2009 to 2013. The recent 5 years. Then we use two

common-size analysis to analyze the balance sheet and the income statement of the Xinjiang Urban Construction Company.

In chapter four we use all the financial ratio to analysis the company's financial statement to find the company's financial is health or not. At start we calculate the most important ratios which is included profitabilities ratio, liquidity ratios, solvency ratios, activity ratios. At the end we use DuPont analysis to know about which part the company need to improve for ROE.

2 DESCRIPTION OF THE FINANCIAL ANALYSIS METHODOLOGY

In this chapter, we will describe financial analysis of a company. We will introduce the financial statement and two methods of financial analysis. It will be three parts of this chapter.

The first part we will describe financial statement. There are three basic financial statements summarizing information about a company. It will be balance sheet, income statement (profit/loss statement) and cash flow statement. The second part is the common-size analysis of a company. It have two type are horizontal common-size analysis and vertical common-size analysis. The last part is financial ratio analysis of a company.

The financial analysis is the process of selecting, evaluation and explain financial data and it is a tool used by managers and investors, but first we need is get the statements materials. Because all the financial analysis is based on the financial statements. The aim of financial analysis are formulate the assessment of the company's present and future financial health. If the financial health is not good. Management have to improve financial position to make it health.

2.1 Financial statements

As we showed at the start of this chapter. The financial analysis of a company is based on the financial statement's date. Those data can be usually get through the company' s annual report and other information. Relevant financial information is presented in a structured manner and in a form easy to understand.Financial statements should be understandable, relevant, reliable and comparable.

We will introduce three main statements in this part: balance sheet, the income statement, and the cash flow statement.

2.1.1 Balance sheet

The balance sheet also called statement of financial position, or statement of financial condition. It is shows enterprise's the current financial position at a specific point in time.

The balance sheet include two main parts are assets and equity plus liabilities. We can easily summarize the information about what the company owns (its assets), the value of these assets and mix of capital (capital structure) used for financing the company's assets. The equity of a company represents the shareholder's investment or the capital belonging to the owners or shareholders of the company. And we can explain the contribution by the owners (by buying shares) or by company's profit. The liabilities are represents money (or capital), that has been borrowed and must be repaid back at some predetermined date. Or we can understand it as the source of capital provided by creditors.

Tab. 2.1: An example of balance sheet

Balance Sheet	
Assets	**Equity and Liabilities**
Current Assets	**Equity**
Cash and Equivalents	Shared Capital
Accounts Receivable	Preference Shares
Inventory	Retained Profits
Short-term Marketable Securities	Profit of the Current Year
Other Current Assets	Other Equity
Long-term Assets	**Current Liabilities**
Equipment	Accounts Payable
Land	Accrued Expenses
Buildings	Short-term Note
Trademark	**Long-term Liabilities**
Patents	Long-term Borrowings
Goodwill	Provisions
Shares	Other Non-current Liabilities
Total Assets	**Total Liabilities and Equity**

The balance sheet showed is the left-hand is assets. The assets list the firm's cash, inventory, property, plant, and equipment, and other investments the company has made. It is

generated either by purchase business activity or financing activities. In the right-side the table is represent the liabilities and equity show the firm's obligations to creditors. At the same time shown with liabilities in the bottom part of the balance sheet is the equity. But the equity is different from the firm's assets and liabilities. It is an accounting measure of the firm's net worth.

We can understand the assets is how the firm uses its investments, and with the sources of capital is how the firm raise the money it needs. Because the equity and liabilities need to be balance with assets as this function:

In the balance sheet, the basic equation is computed as:

$$Assets = Liabilities + equity \ , \tag{2.1}$$

We can find from the example of balance sheet are divided into current and long-term assets.

The current assets are also called short-term assets. It is either cash or assets that could be converted into cash within one year or shorter. It can be classify the three main part. The first part are cash and other marketable securities which are relatively short life, low-risk investments that can be easily sold to relatively quickly converted into cash. The second part we call it accounts receivable which are the money owned the firm by individuals or by other firm on the sale of products on credit. The three part is inventories which are the goods or raw material for sale held by a firm for eventual sale. But we still can find some other current which is includes item such as prepaid expenses. We call it other current assets.

The long-term assets also called fixed assets. It is include long-term assets, relatively long life and relatively low liquidity. The long-term assets such as property or machinery that produce tangible benefits for more than one year. For example the equipment, land, buildings and machine. But it still include intangible assets which like trademark, patents, goodwill and so on.

As we started earlier, the equity represents an accounting measure of the net worth of the firm. Actually the balance sheet can not only provide us with an accurate assessment of the true value of the firm's equity. There need amount of the assets listed on the balance sheet are value based on their historical cost rather than their true value today. So it is changing by profits (or losses) made during the year in the form of dividends.

The liabilities also have two parts which are current liabilities and long-term liabilities. The current liabilities that will be happens during one year. It include accounts payable, short-term debt, accrual item and so on. The long-term are include money that has been borrowed for longer than 12 months. It is also include loans from banks, issue bonds and so on.

2.1.2 Income Statement

The income statement indicates the amount of profit generated by a company over a certain period. This certain period are often be one year. The income statement compares the company's revenues and costs. We can find this equation about income statement.

The income statement equation:

$$Revenue - cost = net\ income\ , \tag{2.2}$$

We can easily understand this equation into three part. The revenues, costs and net income. The revenues are amounts charged for the delivery of goods or services in the ordinary activities of the company. The costs are amounts that must be spent in the ordinary activities of the company.

Tab. 2.2: An example of income statement.

Revenue
Operating revenues
Salaries and payroll costs
Other operating expenses
Depreciation
Operating expenses
Operating profit
Financial income
Financial expenses
Net realized and unrealized securities
Net financial items
Profit before tax
Tax expense
Net profit

The ordinary activities can be divided into two main subtotals are calculated.

The first is operating activity sometimes called operating profit before interest and taxes. We calculated as a difference between the sum of operating revenues and operating costs. The operating revenues are from sale of products, goods, and services. And the operating costs associated with generating operating revenues which like raw material consumption, electricity consumption, depreciation, costs of goods sold, salaries and wages pain to employees, administrative costs and so on. The operating costs also include overhead costs.

The second is financing activity. The financial revenues and financial costs are compared here. Financial revenues are interests received and revenues from owned securities. The dividends received and coupons received are financial revenues. And the financial costs are interests paid, coupons paid, etc.

2.1.3 Cash Flow Statement

The cash flow statement provides information which about company's cash inflows and cash outflows during a certain period. It is often one year. The information are showing

us how much the firm has generated and how that cash has been allocated. The inflows are positive number on the statement which are amount of money received during a period. The negative number is outflows which are amount of money spent during a period.

The statement of cash flows is divided into three sections: operating activities, starts with net income from the income statement. The next section, investment activity, lists the cash used for investment. The third section, financing activity, shows the flows of cash between the firm and its investors. The cash flow statement example is in Tab.2.3.

Tab.2.3 An example of cash flow.

Cash Flows from Operating Activities:
Operating Income (EBIT)
Depreciation Expense
Loss on Sale of Equipment
Gain on Sale of Land
Increase in Accounts Receivable
Decrease in Prepaid Expenses
Decrease in Accounts Payable
Decrease in Accrued Expenses
Net Cash Flow from Operating Activities
Cash Flows from Investing Activities:
Sale of Equipment
Sale of Land
Purchase of Equipment
Net Cash Flow from Investing Activities
Cash Flows from Financing Activities:
Payment of Dividends
Payment of Bond Payable
Net Cash Flow from Financing Activities
Net Change in Cash
Beginning Cash Balance
Sending Cash Balance

Cash flow from operating activities. It includes cash flows from the principal revenue generation activities such as sale and purchase of goods and services. The comparison is

meaningful. The result have the same trend with the sales profit. The result is more higher the ability to generate the cash is more stronger.

Cash flow from investing activities. It include the acquisition of fixed assets, intangible assets and other long-term investment needs to pay the net capital. And buying government bonds or investing in stocks and other payment for financial investment. Cash inflow from investing activities include the transfer of fixed assets or other long-term investments actually received and the financial investment income.

Cash flow from financial activities. It include the offering to raise funds inflow and get the funds from bank loans. And it mainly from the cash dividend, repay the loan principal and stock repurchase fund payments. It is similar with investment cash flow analysis. Financing cash flow is negative in many cases is not bad thing. And it is many investors would like to see that negative situation. Such as reducing debt, pay dividends and stock buybacks to increase shareholder value are beneficial behaviors. On the contrary, the issue of new shares or debt are likely reduce the large interest from existing shareholders.

2.2 Common-size analysis

The common-size analysis is the analysis of financial statement data and their changes over the time. The aim is identify the trends and basic differences. The common-size analysis have two types. There we will introduce this two types.

2.2.1 Vertical common-size analysis

Vertical analysis is an analytic method that can be used to analyze aspects of financial information. In a financial statement, the table of the data used compared with the total we can get the item's positions, importance and changes in the total.

We can find a vertical analysis of balance sheet. It is analysis of the changes in the proportions of selected benchmark. Such as total assets, total liabilities and so on. So the base

figures always are the total assets, total liabilities and equity. And other item a shown as percentage of total liabilities and equity such as current liabilities, non-current liabilities and equities.

We can find the vertical analysis the working capital is:

$$\%\mathrm{E} = \frac{Xi}{\sum_n Xi} \cdot 100 \ , \tag{2.3}$$

where the %E is mean the proportion of the project, Xi is mean the item, is mean the sum of the item. It represent the benchmark. From the result we can find the position, importance and changes of each item in statements.

2.2.2 Horizontal common-size analysis

It refers to reflect the company financial situation of the reporting period compare with the company financial situation of the early or history of a period. It is a financial analysis methods for study on enterprise's operating performance or changes in the financial situation. It is analysis of the evolution of financial statements data over time or their changes with respect to a given period as a benchmark.

The horizontal common-size analysis would be computed as:

$$Absolute\ change = U_t - U_{t-1} \ , \tag{2.4}$$

$$Percentage\ change = \frac{U_t - U_{t-1}}{U_{t-1}} \cdot 100\% \ , \tag{2.5}$$

where U_t is mean amount of benchmark, U_{t-1} is mean the early or history of the benchmark period.

From the introduction we can find the horizontal common-size is really important. It is not just compare the single item to represent the single ratio. It is also can reflect from a big view of the company's financial situation. And the common-size analysis is really helpful for

the investor or the manager to analysis the company's balance and changes. We can use the common-size analysis as a indicator to identify the trends and major differences.

2.3 Financial ratio analysis

Financial ratio analysis is comparison of financial data in the form of financial ratios to assets the financial health of the company. It is calculate from financial data and market data, among which is relationship. Sometimes the ratio has some economical interpretation. Financial ratio analysis have a group of financial ratio.

In this chapter we will introduce five different methods of financial ratios analysis. They are profitability ratios, liquidity ratios, solvency ratio, activity ratio and DuPont analysis.

2.3.1 Profitability ratios

The profitability ratios analyze the company's ability to generate profit from invested capital in the form of return during a period. The profitability is really important information for not just manager. It is also important for the investors and borrowers. The result is a basic for the company to development. The higher of the profitability ratios, the better competitive position of the company.

There have five ratios is the indicator of the company and also for analyze the select company's profitability ratio. It is gross profit margin, operating profit margin, net profit margin, return on assets and return on equity.

Gross profit margin (GPM) calculate the percentage of gross profit and revenue. It means how many money the goods can make after produce or production transformation within the system the part of value-added. Higher gross profit margin indicates more value-added.

The Gross profit margin ratio would be computed as:

$$GPM = \frac{Gross\ profit}{revenue}\ , \tag{2.6}$$

Operating profit margin (OPM) calculate the operating profit per one unit of revenue. It can show how well the company manages its operations. It can also reflect how well the revenue are being generated and operating costs controlled. The higher operating profit margin indicates more revenue are been generated and operating costs controlled.

The Operating profit margin ratio would be computed as:

$$OPM = \frac{operating\ profit}{revenue}\ , \tag{2.7}$$

where operating profit is a amount of money which is paid after expenses and cost at operating activity. profit before interest and tax. And it is also the profit before interest and tax. So we can change operating profit with EBIT.

Net profit margin (NPM) calculate the net profit per one unit of revenue as percentage. It is similar with operating profit margin. But the difference between this two is the net profit margin is measure how well the company generate the net profit.

The Net profit margin ratio would be computed as:

$$NPM = \frac{EAT}{revenue}\ , \tag{2.8}$$

where EAT is the income after all expenses and costs and after tax.

Return on total assets (ROA) calculate the net profit or operating as a percentage for every unit of company's assets. The higher return on total assets ratio the better ability company have for generate the income by a given level of assets.

The Return on total assets ratio would be computed as:

$$ROA = \frac{EAT}{assets}\ , \tag{2.9}$$

where asses is mean the total assets.

There is also have another way to calculate it:

$$ROA = \frac{EBIT}{assets}\ , \tag{2.10}$$

This function is easy for compare the company and give the conclusion. Because the tax is changing and the tax is different in every contrary.

Return on total equity (ROE) is calculate a firm's efficiency at generating profits from every unit of shareholder's equity. When the return on equity ratio is higher, it means more money the shareholder will get from their investment.

The Return on equity ratio would be computed as:

$$ROE = \frac{EAT}{equity}\ , \tag{2.11}$$

where equity is mean total shareholder's equity.

2.3.2 Liquidity ratios

Liquidity ratio measures company's ability to meets its immediate or short-term liabilities and obligations. Liquidity ratio analyze company's liquid assets such as cash and cash equivalents, receivable and inventories. The liquidity assets also analyze the short-term liabilities and obligations. Liquidity of company is mean the ability to have cash available when needed to meet its short-term obligation. There have three important ratio for us to know about. It is current ratio, quick ratio and cash ratio. This three will be used for analyze the selected company in chapter four.

Current ratio is one of the most frequently quoted financial ratio. It measures amount of current assets for every unit in current liabilities. For calculation we need this formula.

The Current ratio would be computed as:

$$current\ ratio = \frac{current\ assets}{current\ liabilities}\ , \tag{2.12}$$

where the current assets is mean short-term assets, the current liabilities is mean short-term liabilities.

The quick ratio (QR) is more stringent test of company's liquidity. The current assets are adjusted for inventories due to the fact, that it is generally less liquid. It must be sold before any cash is collected.

The quick ratio would be computed as:

$$quick\ ratio = \frac{current\ assets - inventories}{current\ liabilities}\ , \tag{2.13}$$

There have another formula, is same with the function (2.13) but different calculate. The formula show as:

$$quick\ ratio = \frac{cash + short\ term\ marketable\ securaties + receivable}{current\ liabilities}\ , \tag{2.14}$$

Cash ratio means a reliable measure of an individual entity's liquidity in a crisis situation. Here we work with the assets that are in the form of cash. Or we can explain it as the marketable security can be sold immediately at the market within a few hours or a few days.

The cash ratio would be computed as:

$$cash\ ratio = \frac{cash + short\ term\ marketablt\ securaties}{current\ liabilities}\ , \tag{2.15}$$

2.3.3 Solvency ratios

Solvency ratio measures the proportion of total assets by the company's creditors. Solvency ratio measures company's ability to meets its long-term obligations. Sometimes called financial leverage ratio. They measure how the company is financed.

Debt ratio(debt-to-assets ratio) is presented how many percentage of the company's assets is financed by debt. The higher of the debt ratio is , the better financial leverage the company have.

The cash ratio would be computed as:

$$debt\ ratio = \frac{total\ debt}{total\ assets}\ , \tag{2.16}$$

where the total debt is mean total liabilities.

Debt-to-equity is similar to debt to assets ratio. But debt to equity ratio is relates the amount of the company's debt relative to company's equity.

The Debt-to-equity ratio would be computed as:

$$debt\ to\ equity = \frac{total\ debt}{equity}\ , \tag{2.17}$$

We can find an example to explain this function. For example if debt to equity ratio is higher than 1. The company uses more debt for assets financing their equity.

Interest coverage (IC) (time interest earned) is tells extend to which the company's operating profit is able to meet current interest payment.

The Interest coverage ratio would be computed as:

$$interest\ coverage = \frac{EBIT}{interest\ paid}\ , \tag{2.18}$$

For example, if interest coverage is 5 then 20% of company's operating profit is consumed by interest paid.

Financial leverage represent how many percent of creditor in the investment take the company's total assets. The high the financial leverage ratio is. It means the more financial leverage the company have.

The Financial leverage would be computed as:

$$financial\ leverage = \frac{EBIT}{interest\ paid}\ , \tag{2.19}$$

Fixed charge coverage is the ratio can reflect the company's fixed coverage ability for finance costs. For calculate we need to add the interest, because interest is costs too.

The Fixed charge coverage ratio would be computed as:

$$fixed\ charge\ coverage = \frac{EBIT + less\ payment}{interest\ payment + least\ payment}\ , \tag{2.20}$$

2.3.4 Activity ratios

Activity ratio measures how well a company uses its assets. It means the assets utilization. Activity ratio is an indicator for how much a company invested in a particular assets relative to the revenues that the assets are generating. The assets utilization has a direct impact on liquidity.

In this part we will introduce several important type of activity ratio for analyze the company and all the ratio is the basic for the activity ratio. And there have come form is divided by days of turnover and number of turnover.

Average collection period (ACP) is measures the conversion of accounts receivable into cash. For example, how long or how many days it takes to collect the company's receivables.

The Average collection period ratio would be computed as:

$$ACP = \frac{accounts\ receivables}{credit\ sales}\ , \tag{2.21}$$

where here the credit sale is same with the sale.

Accounts receivable turnover (ART) is measure the collection and efficient of a company. It mean how many times the account receivable are "roll over" during a year. The higher receivable turnover ratio is the company's collection or credit policies are too stringent.

The Accounts receivable turnover ratio would be computed as:

$$ART = \frac{credit\ sales}{account\ receivables}\ , \tag{2.22}$$

Inventory turnover (IT) give a measure of how quickly a company can sell their goods. It also measures of the number of times inventory is sold or used in a time period such as 1 year. Inventory is the least liquid current assets because it is the goods which haven't been sold.

The Inventory turnover would be computed as:

$$IT = \frac{COGS}{average\ inventory}\ , \tag{2.23}$$

where the COGS is mean costs of goods sold.

Total assets turnover (TAT) is an efficiency ratio which tells how successfully the company is using its assets to generate revenue. For example, if total assets turnover of 1.5 means each unit invested in assets revenue of 1.5.

The Total assets turnover would be computed as:

$$TAT = \frac{revenue}{assets}\ , \tag{2.24}$$

where the assets is mean total assets.

Days of turnover is another way to analyze the company's activity ratios. Days of turnover always calculate the time how long the company will taste to finish a financial cycle. It can be divided into three part which is number is inventory, number of receivable and number of payable.

Number of days of inventory is measures how many days will take for finish a financial cycle of inventory.

The Number of days of inventory would be computed as:

$$number\ of\ days\ of\ inventory = \frac{Inventory}{average\ day's\ cost\ of\ goods\ sold}\ , \qquad (2.25)$$

where average day's cost of goods sold is calculate by the cost of goods sold divides the days of year. The days of year usually uses 365.

Number of days of receivable is measures how many days will take for finish a financial cycle of receivable.

The Number of days of receivable would be computed as:

$$number\ of\ days\ of\ receivable = \frac{accounts\ receivable}{average\ day's\ revenue}\ , \qquad (2.26)$$

where average day's revenue is calculate by the revenue divides the days of year. The days of a year usually uses 365.

Number of days of payable is measure how many days will take for finish a financial cycle of payable.

The Number of days of payable would be computed as:

$$number\ of\ days\ of\ payable = \frac{accounts\ payable}{average\ day's\ purchases}\ , \qquad (2.27)$$

2.3.5 DuPont analysis

DuPont is a methods of performance. In this standard, for bring a higher return on investment the assets need to accounting from the total book value not net book value. The most significant features of DuPont analysis is make associate between several business efficiency and financial status ratio. Make a complete system of indicators. And finally reflect by return on equity. It is enable to analyze what drives the value of financial ratios. For example, we want to know in which factors have impact on its value or evolution. And the principle is to express selected or basic ratio as a product of component ratio.

ROE is the return in equity. We will use return on assets and financial leverage to decompose it. We will use DuPont analysis step by step explain the analysis methods. The first step is decompose the ROE ratio by three component ratio.

$$ROE = \frac{net\ profit}{equity} = \frac{net\ profit}{revenue} \cdot \frac{revenue}{total\ assets} \cdot \frac{total\ assets}{equity} \quad , \tag{2.28}$$

where the ($\frac{net\ profit}{revenue}$) is net profit margin, the ($\frac{revenue}{total\ assets}$) is financial leverage, the ($\frac{total\ assets}{equity}$) is total assets turnover.

Then if you want to decompose the net profit margin we can get:

$$net\ profit\ margin = \frac{net\ income}{EBT} \cdot \frac{EBT}{EBIT} \cdot \frac{EBIT}{revenue} \quad , \tag{2.29}$$

where the ($\frac{net\ profit}{EBT}$) is tax burden, the ($\frac{EBT}{EBIT}$) is interest burden, and the ($\frac{EBIT}{revenue}$)is EBIT margin.

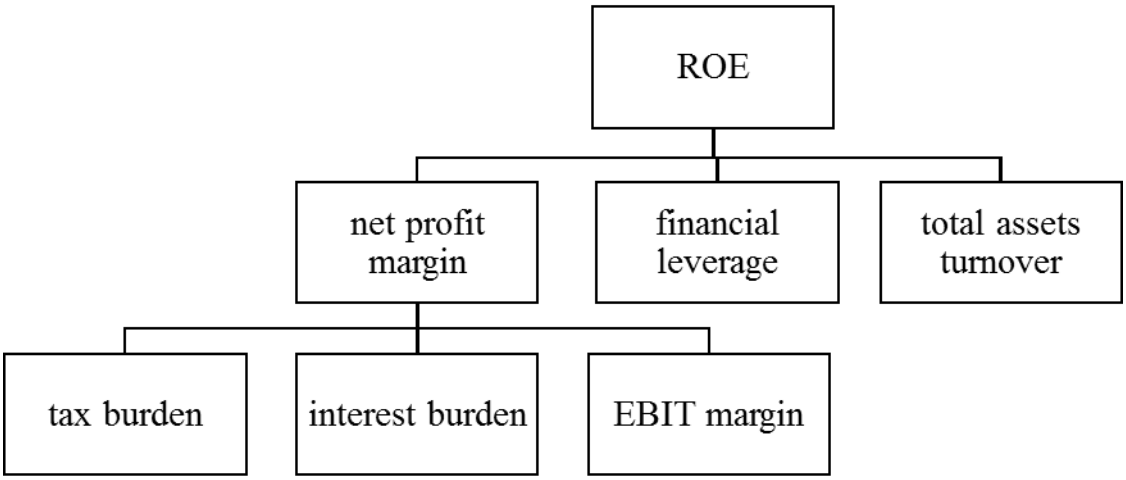
Then if we put the components from net profit with return on equity, we will get:

$$ROE = \frac{net\ income}{EBT} \cdot \frac{EBT}{EBIT} \cdot \frac{EBIT}{revenue} \cdot \frac{revenue}{total\ assets} \cdot \frac{total\ assets}{equity} \quad , \tag{2.30}$$

So this new function include tax burden, interest burden, EBIT margin, financial leverage and total assets turnover. We can use this function for analyze the selected company's financial situation.

This is a chart for make this explain more easily. We can find the influence between each other.

Chart. 2.1 Decomposition of ROE.



There have three methods for quantification of influence: methods of gradual changes, methods of logarithmic decomposition and functional decomposition. But all this three methods is basic on the absolute change, relative change and index of the change.

This three basic change would be computed as:

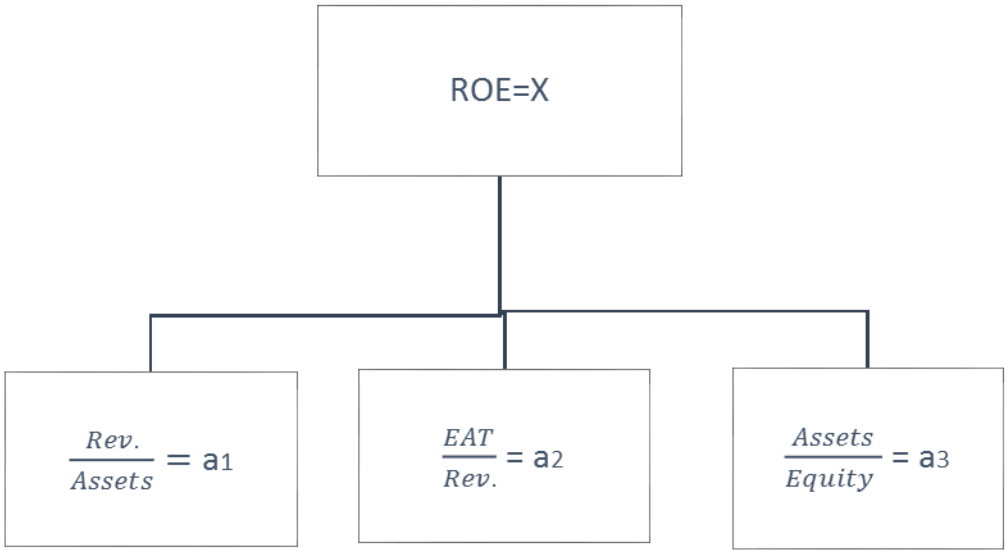
$$Absolute\ change:\ \ \Delta ROE^{abs} = ROE_t - ROE_{t-1}\ , \tag{2.31}$$

$$Relative\ change:\ \ \Delta ROE^{rel} = \frac{ROE_t - ROE_{t-1}}{ROE_{t-1}} \cdot 100\%\ , \tag{2.32}$$

$$Index\ of\ the\ change:\ \ \Delta I_{ROE} = \frac{ROE_t}{ROE_{t-1}}\ , \tag{2.33}$$

Then we need to make the basic ratio decomposing structure. Example show as Chart.2.2.

Chart.2.2 Example of basic ratio decomposing.



Methods of gradual changes is one kinds of probability influence. It means the component ratio change will make basic ratio change. In the case of decomposition with 3 component ratio:

$$\Delta X_{a_1} = \Delta a_1 \cdot a_{2.0} \cdot a_{3.0} , \quad (2.34)$$

$$\Delta X_{a_2} = a_{1.1} \cdot \Delta a_2 \cdot a_{3.0} , \quad (2.35)$$

$$\Delta X_{a_3} = a_{1.1} \cdot a_{2.1} \cdot \Delta a_3 , \quad (2.36)$$

where the X is the basic ratio, the ΔX is absolute change in the basic ratio, the a is component ratio, the Δa is absolute change in the component ratio, and the ΔX_{a_1} is absolute change in the basic ratio caused by the change in the first (a_1) component ratio.

Logarithmic decomposition method is easier for calculate because this methods only have one formula to count it. The formula is for find the how many component ratios we have to make influence to basic ratio. Impact of *i*-th component ratio on the change in the basic ratio is calculate as follows:

$$\Delta X_{a_i} = \frac{In\ I_{a_i}}{In\ I_X} \cdot \Delta X \ , \tag{2.37}$$

where the X is basic ratio, the ΔX is absolute change in the basic ratio, the ($I_x = \frac{X_1}{X_0}$) is the index of change in basic ratio, the ($I_a = \frac{a_1}{a_0}$) is the index of change in component ratio.

Functional decomposition method is good for basic ratio and component ratio in relative changes.is works with the relative changes in basic and component ratios.

The formula for calculation is follows:

$$\Delta X^{relat} = R_x = \frac{X_1 - X_0}{X_0} \ , \quad \Delta a^{relat} = R_{ai} = \frac{a_1 - a_0}{a_0} \tag{2.38}$$

Influence of the i-th component ratio on the basic ratio, the formula for calculation is follows:

$$\Delta X_{a1} = \frac{1}{R_x} \cdot R_{a1} \cdot \left(1 + \frac{1}{2} \cdot R_{a2} + \frac{1}{2} \cdot R_{a3} + \frac{1}{3} \cdot R_{a2} \cdot R_{a3}\right) \cdot \Delta X \ , \tag{2.39}$$

$$\Delta X_{a2} = \frac{1}{R_x} \cdot R_{a2} \cdot \left(1 + \frac{1}{2} \cdot R_{a1} + \frac{1}{2} \cdot R_{a3} + \frac{1}{3} \cdot R_{a1} \cdot R_{a3}\right) \cdot \Delta X \ , \tag{2.40}$$

$$\Delta X_{a3} = \frac{1}{R_x} \cdot R_{a3} \cdot \left(1 + \frac{1}{2} \cdot R_{a1} + \frac{1}{2} \cdot R_{a2} + \frac{1}{3} \cdot R_{a1} \cdot R_{a2}\right) \cdot \Delta X \ , \tag{2.41}$$

The influence is depends on the number. If the number more negative and only the number is big without positive or negative. For example I find three random number which is 3.06, -0.72 and -2.81. from this three we can tell the most one have influence is 3.06. we will

make order for this three number it will be from order 1, 2 and 3. The first one is 3.06, second one is -2.81 and the third one is -0.72.

3 FINANCIAL CHARACTERISTICS OF SELECTED COMPANY

In this chapter, we introduce about financial characteristics of selected company-Xinjiang Urban Construction. As we know different company has different characteristics although they use the same financial analysis methodology. This chapter is divided into two big parts: company introduction and common-size analysis of Xinjiang Urban Construction.

3.1 Introduction of Urban Construction

This part we will introduce the company. And we will got the basic information to let this company showed clearly. We will show the information in four part: history, business, competitor and risk. The Xinjiang Urban Construction was find out at 1993. Now they have more than 30000 employee work in this company. It Is Urumqi first utility class directional raise co., LTD. The companies always believe in "*For customers to create high-quality goods, Create opportunities for employees, Create benefits for shareholders, to create wealth for the society."* In china we have 3 different type of share it is "A shares", "B share", "H share". A share is issued in main-land China and use Chinese currency. B share is mean issued in china but use USD. H share is mean issued in china use HKD (Hong Kong dollar). The company we selected is issued only A share.

3.1.1 Brief History of Urban Construction

The Xinjiang Urban Construction (Group) Co., Ltd is registered industry in February 25, 1993 in Urumqi City Administration for Industry and Commerce. When the company set up the total of share capital are $ 7,500,000.00. They Bonus share five times and increase the capital and enlarge the share two times. Until August 29, 2000 the total share capital of the company increased to RMB 10 million. The company adopt that all the secondary market investors priced placement to the public offering of A shares of common stock for RMB 60 million shares. Par value of share is RMB 1.00. After the change of the total share the capital

become RMB 160 million. In 2006 the company has Second Extraordinary General Meeting decide non-public offering of shares to specific investors. The company issued non-public offering of common share 43 million pieces. After change the total share capital become RMB 203 million. At 2007 after the company's annual shareholders' meeting decide implemented 2 bonus shares for every 10 shares and by capital accumulation fund six shares for every 10 shares. After capitalization the total share capital of the company is RMB 366 million. At 2008 the company has third Extraordinary General Meeting decide non-public offering of shares to specific investors. The company issued non-public offering of common share 84 million. After change the total share capital become RMB 450 million.

3.1.2 Main Businesses of Urban Construction

The company's main business consists of the construction of infrastructure projects. Its mean the company's main industry is construction industry. Also the company got a lot of licenses for their business. It will be more professional for their work. Which is like city water production and supply business, External dispatch the construction a laborer for required and transportation and handling services. But they still have a lot of general business item like development and utilization of municipal construction and municipal facilities. Grade a real estate development and management, commissioned by the agent. And have some other business include overpasses, roads and civil engineering, as well as property development, and new construction material business.

3.1.3 Main Competitor and Risk

The external competitor. The company belongs to the construction industry, with the rapid economic development, urbanization is accelerating urbanization has improved continuously. The development of the construction industry has become an important and indispensable factor of the development of domestic macroeconomic. National response to the economic declined decide to increased investment in fixed assets. National Development and Reform Commission approved a total investment of nearly billion infrastructure investment

projects including urban rail transit, construction of roads and bridges and other large infrastructure projects. With the development of urbanization and domestic economic system reform provides great opportunities for the development of the construction industry. At the same time the increase in the domestic and foreign construction companies. So the future will be entered a development time for construction opportunities and challenges.

The Internal Risk. First the policy risk. The country's monetary policy, the tax policy, the fiscal policy and other macro-control policies will have a significant impact on business development. In this regard, the company will pay close attention to changes of the national policies. Adjust the scale of investment business, strengthen project feasibility study, acclivity carry out market analysis, financial assessment and reduce risk.

Second accounts receivable risk. Because the company is in its infrastructure sector project period is very long, thus the larger the company accounts receivable, its turnover is slow. There is a certain risk of the company’s receivables. The company will continue to strengthen project risk assessment, contract management, and customer credit management to control the risk.

Third the operational risk. Because of the longer production cycle of real estate, project development of raw materials and labor costs rising year by year, contains a greater business risk. The company will strengthen cost management, strict compliance with the decision-making procedures, and increase efforts to control the costs, reasonable planning project development and construction cycle.

The last is the engineering safety risks. The company is in the category of municipal infrastructure construction industry, Therefore the safety management start to be a test for engineering. The company provides a powerful system to protect in terms of strengthening the safety of construction and control the engineering security risk.

3.2 Common-size analysis of Urban Construction

In this part, we will analyze the financial situation of Urban Construction Company by common-size analysis. It include vertical common-size analysis and horizontal two different type of way to analyze it. All the analysis are based on the balance sheet and income statement from the company. All the data are recent 5 years. It will be better for us to analyze it. This is simple 5 years balance sheet and the income statement of Urban Construction Company.

Tab.3.1 Urban Construction Company assets from 2009 to 2013. (in 1000 RMB).

	2009	2010	2011	2012	2013
ASSETS	3 035 186	4 310 248	5 339 275	7 071 588	8 426 089
CURRENT ASSETS	2 091 502	3 290 577	4 230 133	5 942 934	6 855 411
Cash and Time deposits	429 752	572 889	413 034	446 974	723 449
Trade and other receivables	320 938	486 116	869 687	1 487 008	3 411 518
Inventories	1 265 275	2 090 432	2 821 586	3 906 509	2 408 639
Other current assets	75 538	141 141	125 826	102 443	311 804
NON-CURRENT ASSETS	943 684	1 019 671	1 109 143	1 128 654	1 570 679
Fixed assets	520 024	634 725	785 607	745 779	553 622
Long-term investments	47 414	45 984	46 177	44 251	44 509
Construction in progress	214 911	151 956	11 339	32 888	38 138
Intangible assets	28 256	41 099	117 879	118 273	109 813
Other non-current assets	133 079	145 908	148 140	187 463	824 596

For this balance sheet assets part we can find the current assets and non-current assets. This is important information for analysis the company's balance sheet.

Tab.3.2 Urban Construction Company liability & equity from 2009 to 2013. (in 1000 RMB).

	2009	2010	2011	2012	2013
LIABILITIES	1 505 602	2 601 678	3 500 453	5 114 454	6 338 196
CURRENT LIABILITIES	1 255 668	2 146 047	2 645 309	4 102 487	5 848 527
Short-term borrowings	430 000	600 000	997 000	1 413 000	1 486 000
Trade and other payables	460 522	997 996	769 846	1 321 738	1 387 655
Advances from customers	133 965	87 862	86 962	265 023	763 231
Current tax liabilities	57 696	86 549	80 753	94 401	67 228
Other current liabilities	173 485	373 641	710 748	1 008 326	2 144 413
NON-CURRENT LIABILITIES	249 934	455 631	855 145	1 011 967	489 669
Long-term borrowings	234 380	439 338	836 800	994 348	428 400
Provisions			2 311	987	810
Other non-current liabilities	15 554	16 293	16 034	16 632	60 459
EQUITY	1 529 584	1 708 570	1 838 822	1 957 135	2 087 893
Capital Stock	675 786	675 786	675 786	675 786	675 786
Capital surplus	562 038	562 038	562 047	562 047	562 047
appropriative reserve	1 407	2 046	3 148	1 232	1 979
Surplus reserve	61 105	80 601	97 075	119 419	148 188
Undistributed profits	205 942	366 732	476 973	576 562	677 522
Minority interest	23 306	21 367	23 793	22 089	22 371

For this table we can find it is the balance sheet liabilities and equity. This two part is the balance with the assets. Liabilities have two main part include inside. One is current liabilities which is explain the short-term liabilities. Another is non-current liabilities which is explain long-term liabilities.

Tab.3.3 Urban Construction Company income statement from 2009 to 2013. (in 1000 RMB)

	2009	2010	2011	2012	2013
Revenue	1 621 290	2 026 991	2 218 923	2 819 658	4 653 124
Cost of goods sold	1 239 592	1 607 895	1 738 564	2 207 965	3 976 383
Selling expenses	23 380	16 487	22 948	17 395	25 383
Surcharges	64 931	91 415	78 320	101 340	119 765
administration expense	65 628	77 063	102 448	112 002	126 970
Depreciation	4 313	13 209	24 214	57 727	111 314
Other expenses	35 778	41 842	59 846	62 826	85 608
OPERATING INCOME	187 669	179 081	192 583	260 404	207 700
Interest expenses and other financial costs	8 074	444	9 363	76 335	6 392
EBT	179 594	178 637	183 220	184 069	201 308
taxes	27 732	12 421	27 784	30 051	24 069
NET INCOME	151 863	166 216	155 437	154 018	177 238

From this table we can find the income statement in resent 5 years. Income statement is another important financial statement we need for analyze the company.

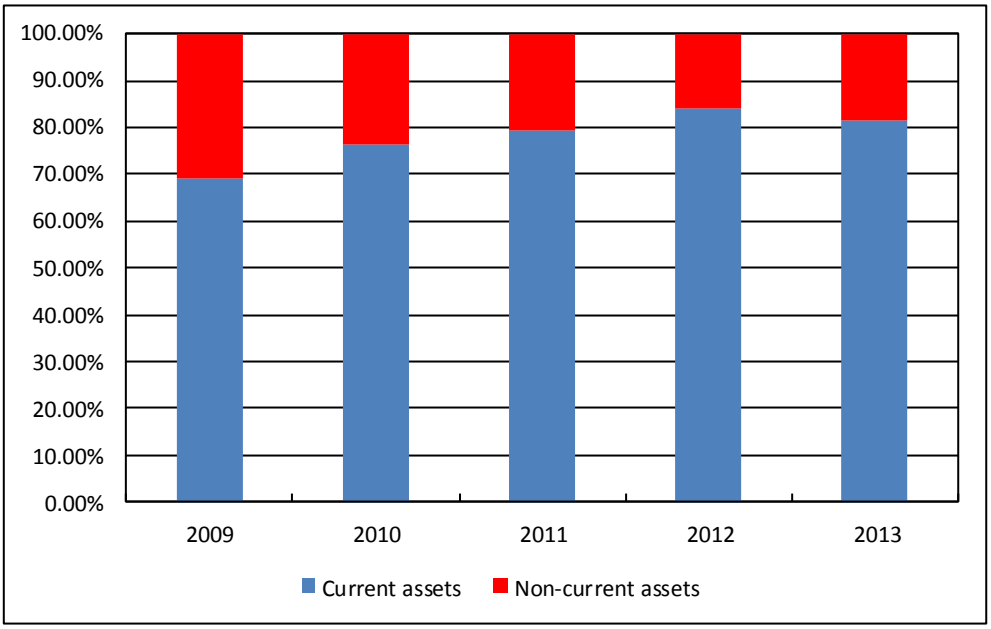
3.2.1 Vertical common-size analysis

There we will use vertical common-size analysis to analyze the company. The vertical common-size analysis is a type of way to analyze the company only focus on the item of percentage and the changes of it. We can find the present proportion of different items to total assets in Tab.3.4. We take the current and non-current assets data to show the individual proportions visually as Chart 3.1.

Tab.3.4 The proportion of each item in total assets. (%)

	2009	2010	2011	2012	2013
ASSETS	100.00	100.00	100.00	100.00	100.00
CURRENT ASSETS	68.91	76.31	77.11	82.54	80.08
Cash and Time deposits	14.16	13.29	7.53	6.21	8.45
Trade and other receivables	10.57	11.27	15.85	20.65	39.85
Inventories	41.69	48.48	51.44	54.26	28.13
Other current assets	2.49	3.27	2.29	1.42	3.64
NON-CURRENT ASSETS	31.09	23.69	22.89	17.46	19.92
Fixed assets	17.13	14.72	14.32	10.36	6.47
Long-term investments	3.87	1.07	0.84	0.61%	0.52
Construction in progress	7.08	4.98	3.92	2.98	2.51
Intangible assets	0.93	0.95	2.15	1.64	1.28
Other non-current assets	2.07	1.97	1.66	1.86	9.15

Chart 3.1 Vertical common-size analyses of assets.



From Tab.3.4 we can find the different percentage of the assets during these 5 years. And the cash and time deposits, trade and other receivables and Inventories consist pertain to current assets. Obviously, we can find from the Chart.3.1 the ratios of items in current assets are higher than non-current assets. The proportion of cash and deposits are decreasing. The proportion of trade and other receivables are increasing. The proportion of inventories were increased in 2010, 2011 and 2012, but decreased in 2013. So if we look at the Tab.3.4 we can

find the changing of this three item in this resent 5 years. From Tab.3.4 we can see Inventories played an important role in total assets in the company. And it almost had the same increasing and decreasing with current assets. These are depends on the huge scale and the long-term target of the company. We know the company has a lot of inventories for their business. But in 2013 their inventories decrease. That is because the company start to make a new bridge with the state government. Whole year they are working on this huge program for city. So they use more inventories than usual but their trade and other receivables increase a lot that year. It is also happened because of the business with the government. And the special data which are Inventories individually takes over high ratios as about 41.69%. And the trade and other receivables are changing opposite with inventories. From 2009 to 2013 the trade and other receivables are increasing. Not just because the inventories are decrease. It happened `also have another reason. It is the company start to have more and more business day-by-day.

In the long-term investment we can see the fixed assets are decreasing. And the long-term investments are decreasing also. The construction in progress at 2009 is 7.08%. When 2013 it decrease to 2.51. That is because of the company need money to make business with the building. So they move the important part to the new business not keep it in fixed assets. The only item in long-term assets increase is other non-current assets. It is include the goodwill and other little non-current assets. And with the fixed assets decrease the goodwill are increasing. It is because of the business with the company it cannot be fast. Every building and progress need time to finish.

We can find in Chart.3.1. The proportion of current assets is 68.91% in 2009. Then it increase to 76.34% in 2011. It does not slow down but still keep increasing to 79.22% in 2012. We can see the increase of the current assets is steady. Even in 2012 is still increasing. But at 2013 it decrease from 84.04 to 81.36%. Because of the company is doing the business of the new bridge and long-term business. So they need current assets for operating their company. This is the reason the percentage of current assets is higher than non-current assets.

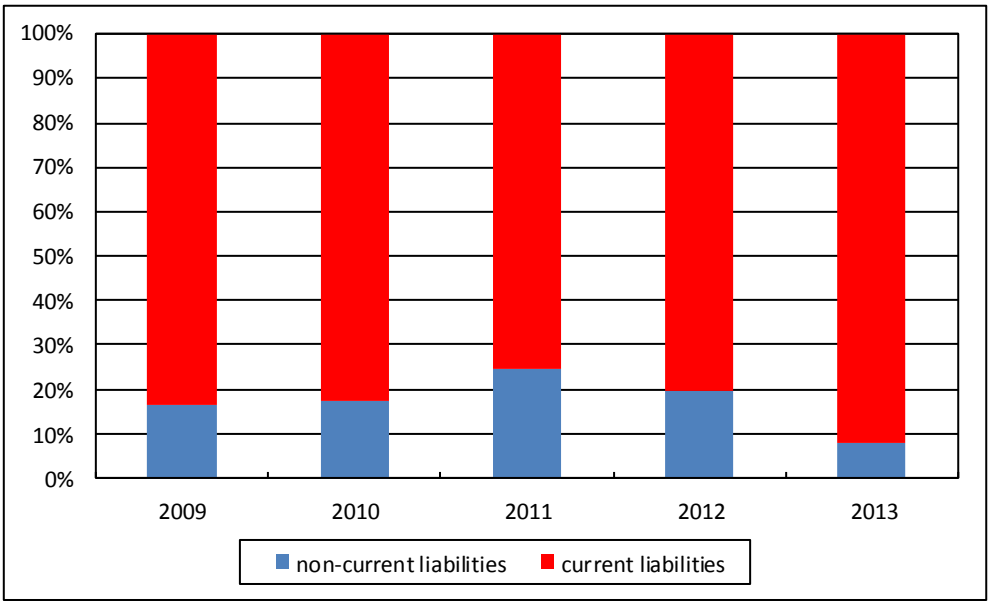
Then we will discuss another important part of balance sheet. It is liabilities and equity. It also can explain the company financial standing. This is a sheet about present the proportion of different items to total liabilities in Teb.3.5.

Tab.3.5 The proportion of each item in total liabilities & equity. (%)

	2009	2010	2011	2012	2013
LIABILITIES	100.00	100.00	100.00	100.00	100.00
Current liabilities	83.40	82.49	75.57	80.21	92.27
Short-term borrowings	28.56	23.06	28.48	27.63	23.45
Trade and other payables	30.59	38.36	21.99	25.84	21.89
Advances from customers	8.90	3.38	2.48	5.18	12.04
Current tax liabilities	3.83	3.33	2.31	1.85	1.06
Other current liabilities	11.52	14.36	20.30	19.72	33.83
Non-current liabilities	16.60	17.51	24.43	19.79	7.73
Long-term borrowings	15.57	16.89	23.91	19.44	6.76
Provisions			0.07	0.02	0.01
Other non-current liabilities	1.03	0.63	0.46	0.33	0.95
EQUITY	100.00	100.00	100.00	100.00	100.00
Capital Stock	44.18	39.55	36.75	34.53	32.37
Capital surplus	36.74	32.90	30.57	28.72	26.92
appropriative reserve	0.09	0.12	0.17	0.06	0.09
Surplus reserve	3.99	4.72	5.28	6.10	7.10
Undistributed profits	13.46	21.46	25.94	29.46	32.45
Minority interest	1.52	1.25	1.29	1.13	1.07

For easy to show the individual proportions visually we take the data from Tab.3.5 in Chart 3.2 the comparison between long-term liabilities and current liabilities.

Chart 3.2 Vertical common-size analysis of liabilities.

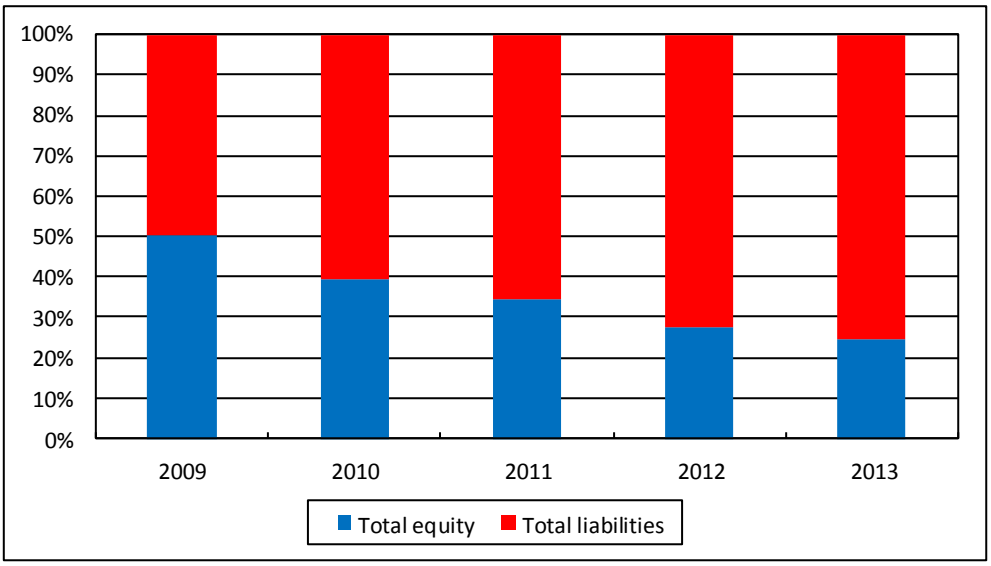


We can see the Chart.3.2 and Tab.3.5. The changes between liabilities was stable. In total liabilities account payable is a biggest part belongs to current liabilities took over an important position more than 20%. In non-current liabilities, long-term borrowing took important position more than 15% expect 6.76%.

From Chart.3.2 we can find the difference between current liabilities and non-current liabilities. The non-current liabilities took the heavy ratio of liabilities more than 70%. The long-term borrowing normally become to be a common chose of company to finance. Because of the low risk and interest. We can find in 2013, total current liabilities decrease to 7.76%. It is because the company paid back their part of long-term liabilities.

With liability, companies usually have another financing item which the funds are from the holder of company. It is called equity. That's mean the assets financed by liabilities and equity are shown as Chart 3.3.

Chart 3.3 Vertical common-size analysis of liabilities and equity.



Equity and liabilities are two main financing item of companies. Equity means ownership of the company and liabilities means debts of the company. The liabilities have higher ratio than equity. It can help companies gain the advantage of leverage which come with high risk. We can find from 2009 to 2013, the liabilities were keep increasing. This stable improved the company's financing structure.

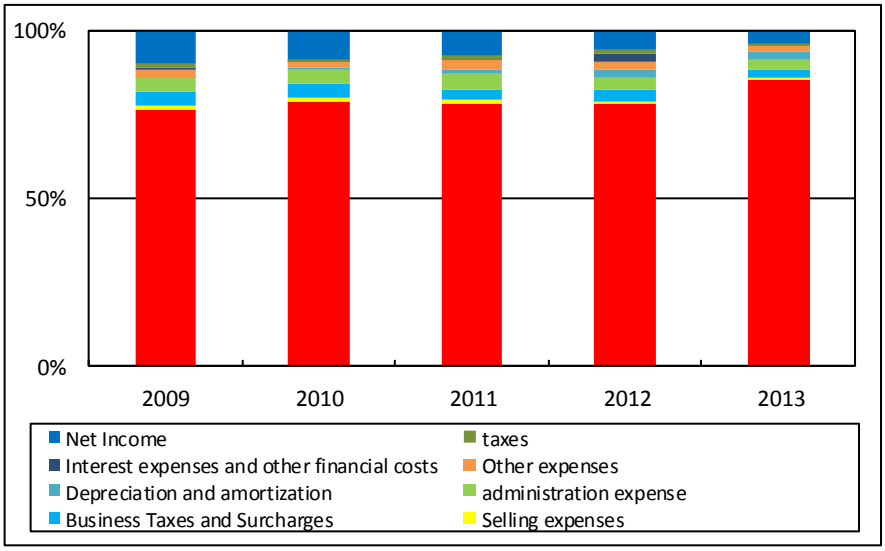
We also made horizontal analysis of consolidated income statement from company financial statement. Income statement can presents information on the financial results of a company's business activities. So it is really important to measure the profitability of a company. In Tab.3.3 shows the income statement of Urban Construction Company in recent 5 years. And we calculate the proportion of journalizing items to total revenue in Tab. 3.6.

Tab 3.6 Proportions of journalizing items to total revenues. (%)

	2009	2010	2011	2012	2013
Revenue	100	100	100	100	100
Cost of goods sold	76.46	79.32	78.35	78.31	85.46
Selling expenses	1.44	0.81	1.03	0.62	0.55
Surcharges	4	4.51	3.53	3.59	2.57
administration expense	4.05	3.8	4.62	3.97	2.73
Depreciation	0.27	0.65	1.09	2.05	2.39
Other expenses	2.21	2.06	2.7	2.23	1.84
Interest expenses and other financial costs	0.5	0.02	0.42	2.71	0.14
taxes	1.71	0.61	1.25	1.07	0.52
Net Income	9.37	8.2	7.01	5.46	3.81

We can find from Tab.3.6. The biggest item of income statement is cost of goods sold. From the cost item we can notice it was the biggest outlay which was more than 75%. Especially in 2013 it was increasing to 85.46% which is really high. And depreciation and amortization remained to decrease while selling expenses were on contrary. For easy to explanation we make the histogram to show the proportions visually as Chart.3.4 the data from Tab.3.6.

Chart 3.4 Vertical analysis of income statement. (%)



From Chart.3.4 and Tab.3.6 we can find all the item were stable. The administration expenses, business taxes and surcharges and selling expenses was really stable. Taxes in 2010 decrease. And start in 2013 it decrease again. But the interest expenses and other financial costs start to increase from 2010. At 2012 it even increase still 2.71%. This is because of the company had a relatively high debt at the same time. But in 2013 it decrease 0.14%. It means the company reduced their loan or paid back part of their debts. And in 2012 were not normal. The depreciation and amortization and interest expenses and other financial costs were really small. It make take year's net income decrease. As we introduce at the in front. The company that year have a big business with building a new bridge. It cost a lot of machinery and other things. It make the expenses increase. We can find the result is the value of operating income and net income was really high in 2013. Almost achieve 178million. In the other hands, Urban Construction Company has a stable developing structure

3.2.2 Horizontal common-size analysis

This part we will describes horizontal common-size analysis of Urban Construction Company, and analyze the evolution of financial statements data over the time. We will compare each item's changes with respect to a given period as a benchmark. The benchmark is the given data of last year. We calculate the absolute change in balance sheet in Tab.3.7. The percentage change in balance sheet between two different time periods in Tab.3.8. For calculate we use the main item and data from Tab.3.1.and Tab 3.2.

Tab. 3.7 Absolute change of each item in balance sheet (1000RMB).

	2009/2010	2010/2011	2011/2012	2012/2013
Current assets	1 199 075	939 555	1 712 802	912 477
Non-current assets	75 987	89 472	19 512	442 024
Total assets	1 275 062	1 029 027	1 732 313	1 354 501
Current liabilities	890 379	499 262	1 457 178	1 746 040
Non-current liabilities	205 697	399 513	156 822	- 522 297
Shareholders' equity	178 986	130 252	118 313	130 758

Tab.3.8 Percentage change of each item in balance sheet (%).

	2009/2010	2010/2011	2011/2012	2012/2013
Current assets	57.33	28.55	40.49	15.35
Non-current assets	8	8.77	1.76	39.16
Total assets	42.01	23.87	32.44	19.15
Current liabilities	70.91	23.26	55.09	42.56
Non-current liabilities	82.3	87.68	18.34	-51.61
Shareholders' equity	11.7	7.62	6.43	6.68

From the Tab.3.7 we can see all the assets were increasing by compared with the year before that year. But in 2011 the assets 1029027 were lower than 2010 the assets 1275062. It means the increasing speed were decreasing. Same as in 2013. But in 2012 the current assets 1712802 is the highest in recent years. But the non-current were decrease from89472 in 2011 to 19512 in 2012. Although the non-current assets increasing speed were decrease the total assets also the highest 1732313 in recent years. Because in 2012 the Urban Construction Company got the now business with building the new bridge. So their account receivable were increase and Construction in progress were decrease. We know from Tab.3.8 that the current assets were very low in 2013 and the long-term liabilities were decreasing in that time also. It is because of the interest expenses from liabilities usually was paid by the current assets. When the liabilities increase, the amount of current assets will increase also. While the most outstanding changes were shown in 2013. As the explanation as before, it was because the earning of disposal covered the expenses. And the company long-term liabilities has been paid off, so the non-current liabilities as well as including total liabilities decreased. All the data changed mildly. It can show the company was stable in recent 5 years. The equity in the graph kept increasing and mildly. It is easy to show the increasing profit of the company's holder and the good welfare structure. Among those lines, which showed the long-term debts of financing activities. All of them were increasing exclude non-current liabilities. Non-current liabilities' decreasing also means the relative low risk.

We also have horizontal analysis of income statement. The horizontal common-size analysis of income statement showed the changes of profits and costs during the recent 5

years. It represent the development of the company with the time goes by. As usually we calculate the absolute change in the income statement in Tab.3.9. The percentage change in the income statement between two different time periods in Tab.3.10. For calculate we use the main item and data from Tab.3.3.

Tab.3.9 Absolute change of each item in consolidated income statement (1000RMB).

	2009/2010	2010/2011	2011/2012	2012/2013
Revenue	405 701	191 932	600 735	1 833 465
Cost of goods sold	368 303	130 669	469 401	1 768 418
Selling expenses	- 6 893	6 461	- 5 553	7 988
Surcharges	26 484	- 13 095	23 020	18 425
administration expense	11 435	25 385	9 553	14 968
Depreciation	8 896	11 005	33 513	53 587
Other expenses	6 064	18 005	2 980	22 782
OPERATION INCOME	- 8 588	13 503	67 821	- 52 704
Interest expenses and other financial costs	- 7 631	8 920	66 972	- 69 942
EBT	- 957	4 583	849	17 239
taxes	- 15 310	15 362	2 267	- 5 982
NET INCOME	14 353	- 10 779	- 1 418	23 220

Tab. 3.10 Percentage change of each item in consolidated income statement (%).

	2009/2010	2010/2011	2011/2012	2012/2013
Revenue	25.02	9.47	27.07	65.02
Cost of goods sold	29.71	8.13	27	80.09
Selling expenses	-29.48	39.19	-24.2	45.92
Business Taxes and Surcharges	40.79	-14.32	29.39	18.18
administration expense	17.42	32.94	9.33	13.36
Depreciation and amortization	206.29	83.31	138.41	92.83
Other expenses	16.95	43.03	4.98	36.26
OPERATION INCOME	-4.58	7.54	35.22	-20.24
Interest expenses and other financial costs	-94.5	2010.04	715.25	-91.63
EBT	-0.53	2.57	0.46	9.37
taxes	-55.21	123.68	8.16	-19.9
NET INCOME	9.45	-6.49	-0.91	15.08

From Tab.3.9 and Tab.3.10, the relative change present the relationship as ratios which are according to the horizontal analysis. It shows the same problems. As the accurately budget and development of productivity to growth, the company's depreciation and amortization and cost of sales always are increased from 2009. Because the company start to have stable customer and goodwill. The company's interest expenses decrease by years. It was a good way to raising the incomes of company. And it means the company reduced their loan or paid back part of their debts. The revenue in 2013 was changing really fast. It increase from 600735 to 1833465. Only the change was increased more than 3 times. But at the same time the cost of goods sale increase as well. The company's development not just increasing the revenue. At the same time it will increase the expenses too. So if the fortuitous events occurring maybe the net profit will not have big change because of only increase revenue not expenses. From those two table we can find except 2013 the revenue increase so fast, with the nice financial structure the trends of Urban Construction Company was positive and stable.

4 FINANCIAL ANALYSIS OF URBAN CONSTRUCTION

In this chapter, we will measure company's financial situation by analyze the financial ratio. Financial ratio analysis is the method that evaluate the financial position and of the company through accounting records and other information. This chapter divided into 4 part, which is profitability of Urban Construction, liquidity of Urban Construction, solvency of Urban Construction and activity of Urban Construction.

4.1 Profitability ratio of Urban Construction

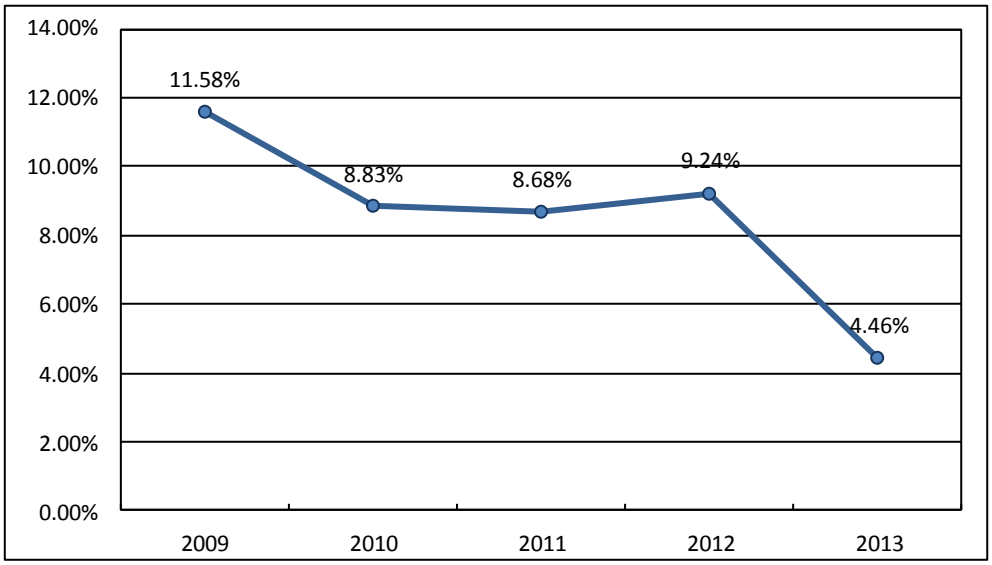
In this part, we will use profitability ratios measure the Urban construction company's ability to generate profitable sales from invested capital in the form of return during a period. The profitability ratio be presented by operating profit margin, return on assets and return on equity. From the Tab.3.3 we can find the information we need. We use income statement calculate this Tab.4.1. This operating profit margin ratio use the function own use for calculate it can be found at (2.7). The net profit margin ratio function can be found at (2.8). The return on assets ratio function can be found at (2.9). And the function of return on equity can be found at (2.11).

Tab.4.1 Profitibilities analysis of Urban Construction from 2009 to 2013.(%)

	2009	2010	2011	2012	2013
operating profit margin	11.58	8.83	8.68	9.24	4.46
net profit margin	9.37	8.20	7.01	5.46	3.81
return on assets	5.00	3.85	2.83	2.14	2.07
return on equity	9.93	9.73	8.45	7.87	8.49

Operating profit margin (OPM) is an indicator which can show how well the company manages their operations. For calculate this operating profit margin, we need to know total revenues and operating profit, results are presented in Chart.4.1. The ratios of Urban construction in recent 5 years.

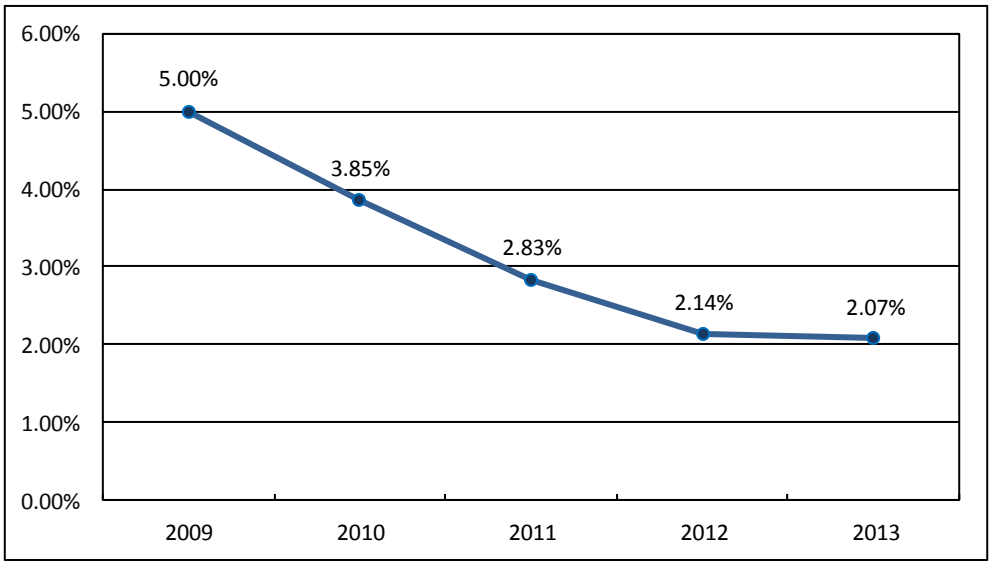
Chart 4.1 Operating profit margin of Urban Construction from 2009 to 2013.



We can find from this chart 4.1 in 2009 the operating profit margin is 11.58%. It means when the company get 1 RMB revenue, deducting all costs and expenses other than taxes and interest, it only remains 0.1158 RMB as operating profit. We can see the ratio is decreased between 2009 and 2011, from 11.58% to 8.68%. The main reason is the increasing of operating profit is lower than increasing of total revenues between 2009 and 2011. Then the operating profit is decreased in 2012, so the decline of the ratio start to increase. Because the higher operating expenses happened because the increasing new building, the operating profit had to decreased. In this care, better to have higher ratio, but in the Urban construction the ratio is decreasing, it means the company's profit ability becomes poor, it's bad to the company. The curve of operating profit margin is very stable expect the ratio in 2012. It means Urban construction's bottom line was always around 9% of revenues before deductions for tax authorities and payments to creditors.

Return on assets (ROA) is an indicator to show how profitable a company is relative to its total assets. The ratios of return on assets in recent 5 years are show in Chart 4.2.

Chart 4.2 Return on assets of Urban Construction from 2009 to 2013.

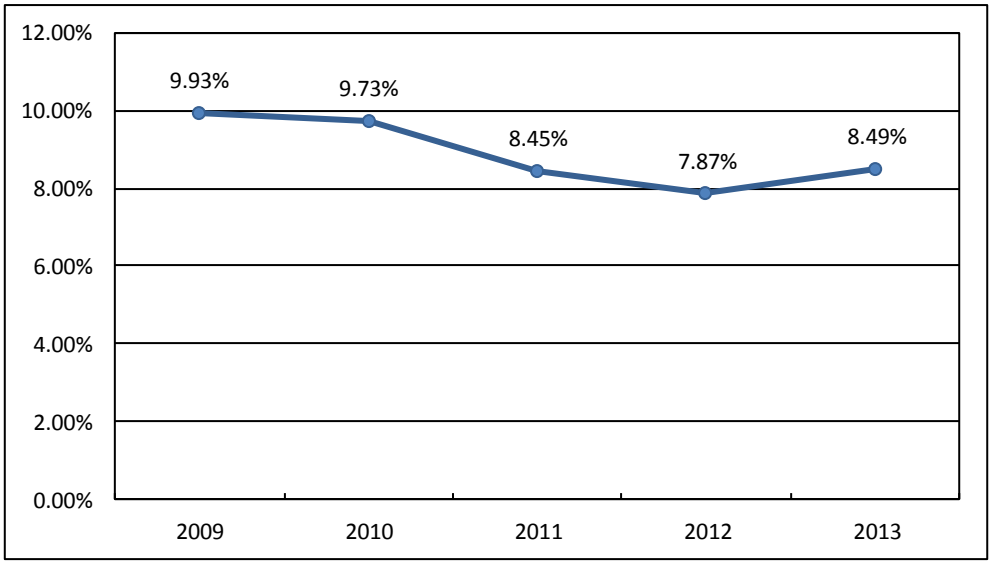


Return on assets measures the operating profit as a percentage for every unit of a company on its assets. We use assets to show the using of company's funds. So the income from its using means return on assets. For calculate we need to know operating profit and total assets. We can find in 2008 the ratio is 5%. It means when the company got 1 dollar assets, it can be earn 0.5 RMB as net income. From these reason we can find the return on assets were around 2.5% and decrease slowly. From 2009 to 2012 the ratio is decreasing. But in 2012 to 2013 it only decrease 0.07%. The main reason is total assets is increasing speed as faster than net profit. Because recent year the Chinese building have a lot of problem about quality and safety. So the government start to ask the construction company use more better quality and safety resources. This is the mean reason the expenses start to increase. This reason make the net profit decrease. But in 2012 the return on assets decrease start to be slowly. Because that year the big business with city bridge program finished. The company do not need so much expenses for purchasing resources. Even though this is another good indicator to show the company start to earn more operating profit.

Return on total equity (ROE) measures the company's profitability by revealing how much earning a company can get with the money shareholders have invested. The money shareholders have invested we call it equity. It is one of main financing methods which paid

by the shareholder of company. The return on equity of the Urban construction in recent 5 year is shown as Chart 4.3.

Chart 4.3 Return on equity of Urban Construction from 2009 to 2013.



From this Chart 4.3 we can find the return on equity in 2009 is 9.93%. It means the company can gain 0.93 RMB when use 1 RMB assets which financed by the holders of the company. We can find that ROA and ROE have many similarity between each other whatever the factor of affect. It is because the sum of total liabilities and equity always equals to the total asset. For the investments mentioned because of the factor of profits on disposal before, the return on equity ratios in 2012 achieve the lowest ratio. After 2012 start to increase. At 2013 achieve 8.49%. We know the most important item for return on equity is net profit and equity. We can find in income statement. The net profit is decreasing from 2010 to 2012. At the same period the equity is increasing. This is because of the company is doing the long-term business. They need shareholder to invest money first to have money to purchase the raw material for building needs. Than after the company finish the project then they can earn money for return. So from 2010 the company got the project the net profit start to decrease. And from 2012 to 2013 the company finish the project they start to slowly earn money back. The net income start to increase. This is the reason why the return on equity decrease from 2010 to 2012. And start to increase from 2012 to 2013.

Without the change by the investments profits on disposal and others in 2009 to 2002, the return on equity was increasing in 2012 to 2013. It represents the increasing of the company's profitability' power.

4.2 Liquidity ratio of Urban Construction

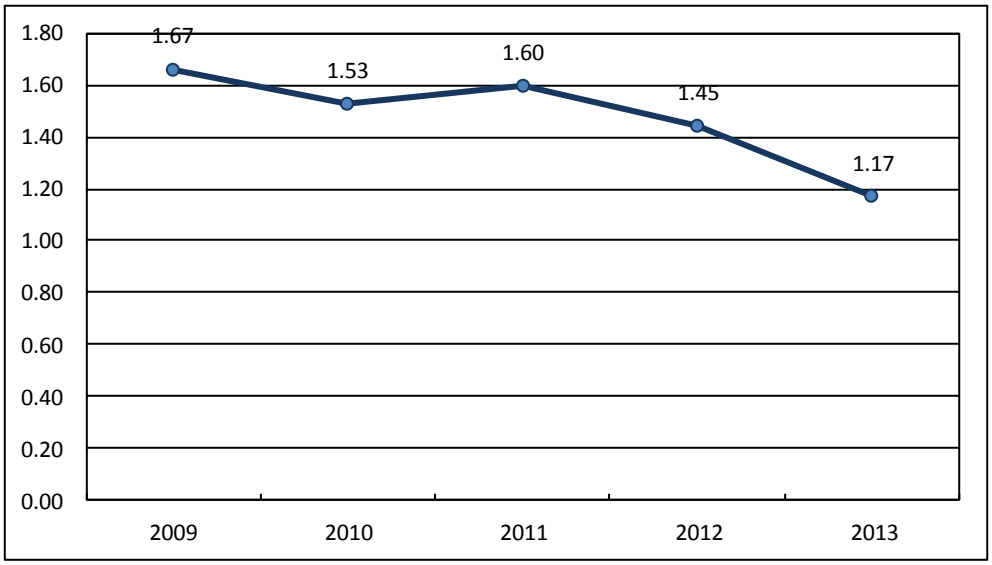
In this part, we will use liquidity ratios measure the Urban construction company's to meet its short-term obligations using assets which are most readily converted into cash. The liquidity ratio reflects the short-term assets such as cash and cash equivalents, receivables and inventories. The liquidity ratio have three parts: current, quick ratio and cash ratio. From the Tab.3.3 we can find the information we need. We use income statement calculate this Tab.4.2. This current ratio use the function own use for calculate it can be found at (2.12). The quick ratio function can be found at (2.13). And the function of cash ratio can be found at (2.15).

Tab.4.2. Liquidity ratio of Urban Construction from 2009 to 2013.

	2009	2010	2011	2012	2013
current ratio	1.67	1.53	1.60	1.45	1.17
quick ratio	0.66	0.56	0.53	0.50	0.76
cash ratio	0.40	0.33	0.20	0.13	0.18

Current ratio is one of the most frequently quoted financial ratios. It measures the company's capacity to meet its short-term obligation. For calculate current ratio we need current assets and current liabilities. Use current assets over current liabilities we can get current ratio. This is the recent 5 years current ratio chart.

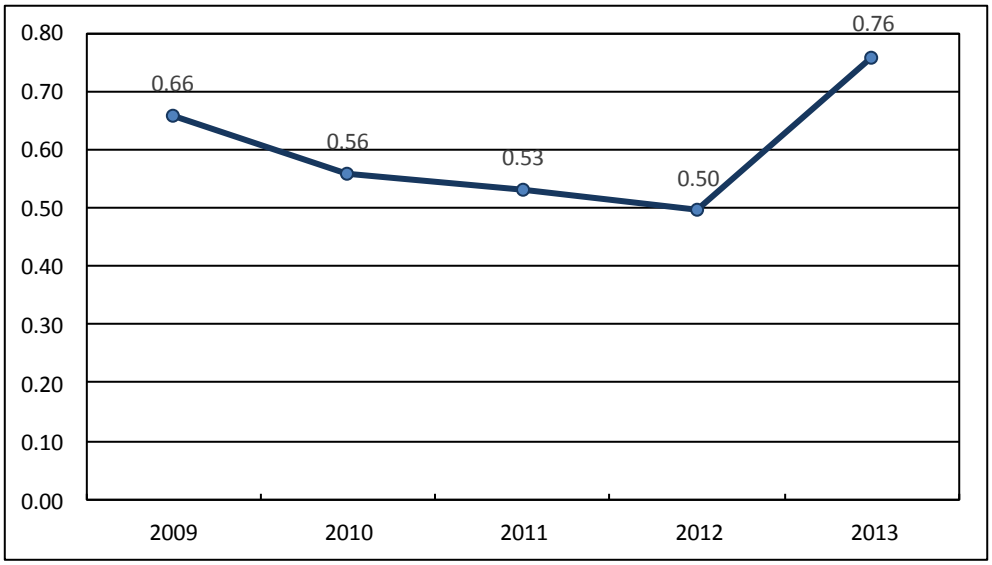
Chart 4.4 Current ratio of Urban Construction from 2009 to 2013.



In current ratios, the ratio more higher it is mean more liquidity the company is. We can find in 2009 the current ratio is 1.67. it means the book value of its current assets equiles 1.67 times of the book value of its current liabilities. From this chart we can find all these ratios were higher than 1. It represent the high level of liquidity. In 2010, the ratio dscrease by 0.14, because the payments for payable and debts in that year increased than the past year. In 2011, the ratio was increasing because the company repaid part of the long-term debt and the interest was increased. But from 2011 to 2013 the liquidity ratio is keep decreasing. This is because from 2011 the big business start to work on. So the company need for money to purchase the raw material to build the bridge. So the assets is increasing but still slower than the speed of current liabilities increase. They get more payable and debt. And this company is industry company. They will earn money after they finish their building. This is long-term business work. So they will got their money after 2013. So in 2013 their liquidity ratio is the lowest.

Quick ratio (QR) is similar to the current ratio but this function we use current assets without inventory instead of current assets. Because the inventory is the least liquid current assets. The recent 5 years quick ratio is showed in Chart 4.5.

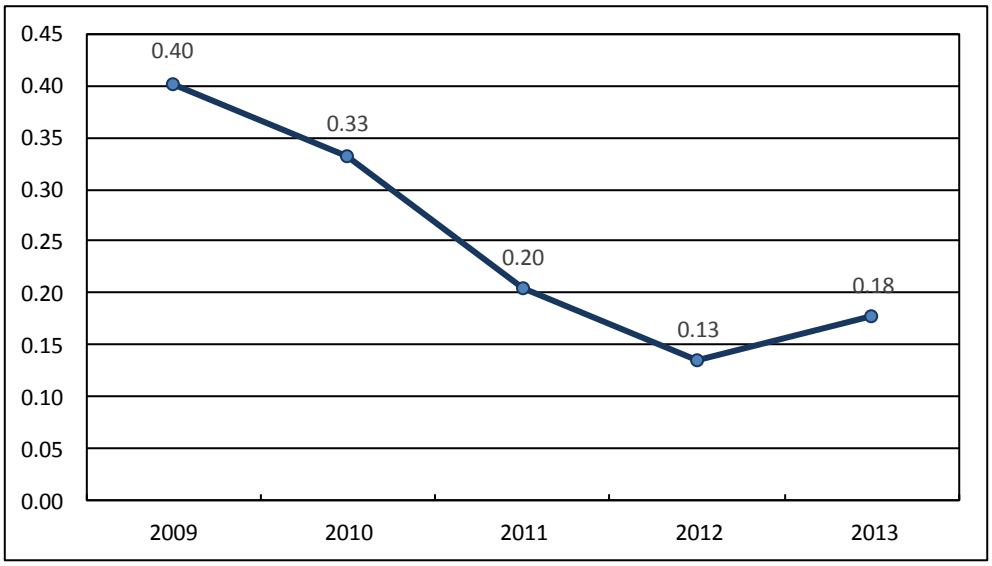
Chart 4.5 Quick ratio of Urban Construction from 2009 to 2013.



From the chart we can see the line of quick ratio is not similar to the line of current ratio. Because the quick ratio have the difference between the current ratio, it does not have the inventories in current assets, so the ratio is not smaller. From this chart we can find all the number is smaller than 1. This company have quick ratio smaller than 1. It means the quick assets is smaller than current liabilities. So the selected company does not have the ability that current can be converted into cash immediately to repay current liabilities. It is not good for company to take fast money when they need it in not far future. But this company is doing building and industry work. So they only earn long-term business money. They quick ratio cannot judge the company. From the chart we can find from 2009 to 2012 the quick ratio is decreasing. Especially in 2012 is the lowest 0.5. But in 2013 it increase to 0.76. This is because the company this 2009 to 2011 doing business. They start to get the cash and time deposits. Even their short-term investment is increasing. So the quick assets increasing faster than current liabilities. This is good signal for the company.

Cash ratio means a reliable measure of an individual entity's liquidity in a crisis situation. For calculate cash ratio we need cash and marketable securaty and current liabilities.From the Tab.4.2 we can make Chart 4.5 for show the recent 5 years from 2009 to 2013 the cash ratio of Urban Construction.

Chart 4.6 Cash ratio of Urban Construction from 2009 to 2013.



We can see the line of cash ratio is similar to the quick ratio. Because the cash ratio compare with the current ratio, it does not have one item which is inventory and receivables. Cash ratio should be higher than 0.2 in normal company. But from this chart we can find the cash ratio is higher than 0.2 from 2009 to 2011. It means the liquidity is high, but cash and marketable security is useful without earning from investment. And the cash ratio is lower than quick ratio. From this chart we can find the cash ratio is lower than quick ratio. It is means the company have less cash and marketable security. The cash ratio of Urban Construction is from 0.40 to 0.18 is lower than 0.2. It means the company have lower proportion of cash and marketable security. Because from 2012 to 2013 the company start to get their money from the business. This is another reason the cash ratio have same change with quick ratio in 2012 and 2013. Because the cash and time deposits start to increase really fast. It is good for company to finance their money to earn more.

4.3 Solvency ratio of Urban Construction

In this part, we use debt ratio and debt to equity ratio to measure Urban Construction's ability to measure its liabilities. Results of debt ratio are in Tab 4.3 and Chart 4.7 and Chart 4.8. We can find the calculate function for debt ratio from (2.16). And the function for

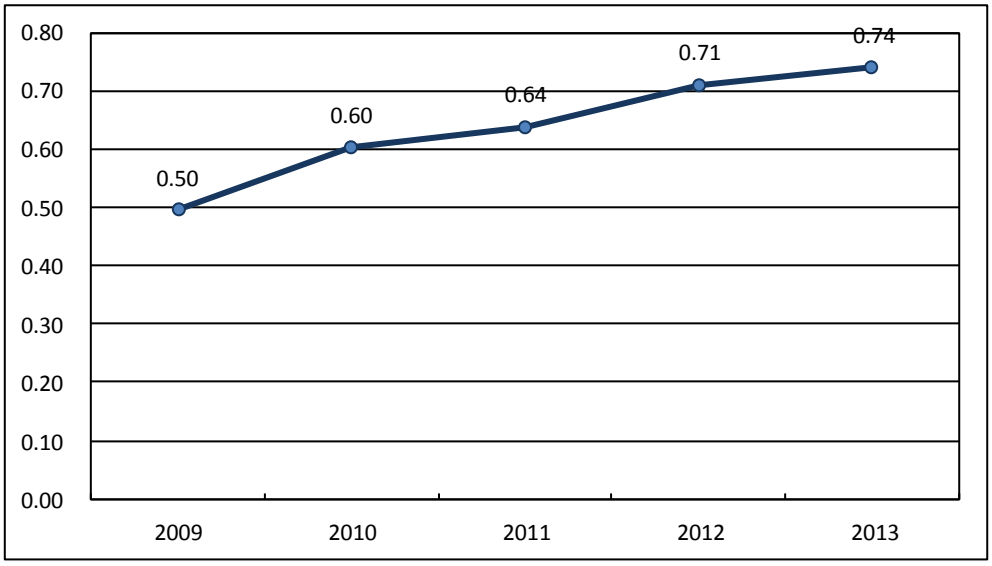
debt-to-equity ratio from (2.17). Solvency ratio measures the proportion of total assets financed by the company's creditors. There are two types of solvency ratios. The first type focuses on balance sheet measures of outstanding debt relative to the second sources of financing shown as debt to assets ratio and debt-to-equity ratio.

Tab.4.3. Solvency ratio of Urban Construction from 2009 to 2013.

	2009	2010	2011	2012	2013
debt ratio	0.50	0.60	0.64	0.71	0.74
debt to equity	0.98	1.52	1.90	2.61	3.04

Debt ratio is called debt-to-assets ratio also. The debt ratio is measures the percentage of total assets financed with debt. We use Tab.4.3 make this Chart.4.7 for analyze debt-to-assets ratio. From this chart we can find the recent years from 2009 to 2013 the debt ratio of Urban Construction.

Chart.4.7 Debt-to assets ratio of Urban Construction from 2009 to 2013.

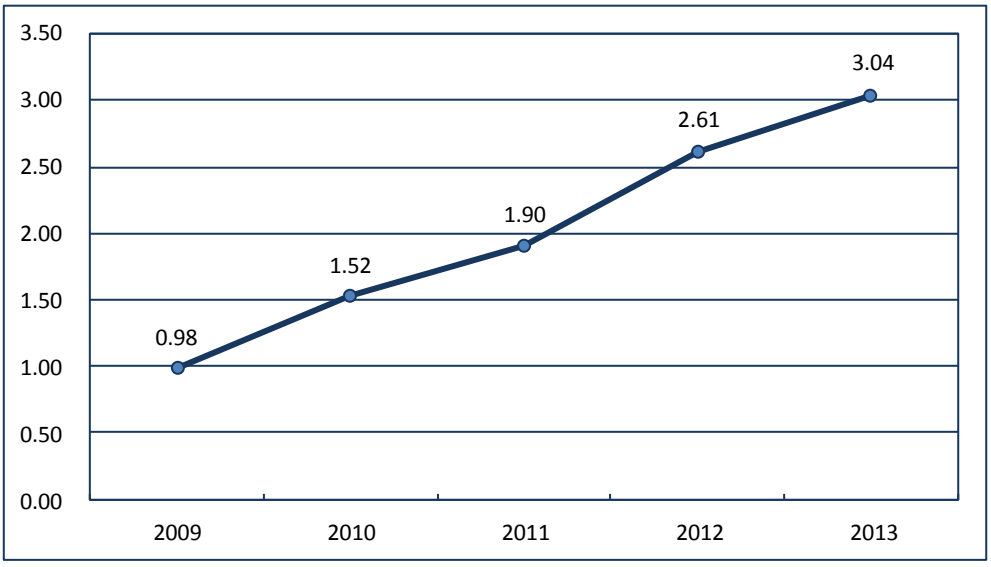


From this chart we can see from 2009 to 2013, the ratio is increasing from 0.5 to 0.74. The main reason is total liabilities increasing speed faster than total assets from 2009 to 2013. Because the current liabilities are increased because they need a lot of money for parches the resources. The ratio should be about 0.50 or lower in normal company, but in the construction company they will have higher debt then normal company. So the result is normal for this company also. Debt to assets ratio of Urban Construction is very good between 2009 and

2013, but it's increasing, however it's a good signal to the company. The risk in Urban Construction is increasing but not much. The ability of paying liabilities is strong.

Debt-to-equity ratio is similar with debt-to-assets ratio. The debt-to-equity ratio is measures the amount of debt capital relative to equity capital. We use the information from Tab.4.3 make this Chart 4.8.

Chart.4.8 debt-to equity ratio of Urban Construction from 2009 to 2013.



From this chart we can see the debt-to-equity ratio is always increasing from 2009 to 2013, from 0.98 to 3.04. The main reason is the total equity is increased really slowly from 2009 to 2013 and total debt is increasing fast in this period. Because the current liabilities are increasing really fast in this period. The business the company do is really important information for analyze. The reason the debt to equity ratio is increasing is similar with the debt to assets. The main reason is the current liabilities increase because of the long-term business. They need have to pay the payment and debt then they will get the money they earn. Debt to equity ratio should be around 1 for normal company, so from this chart we can see the ratio is lower than 1 in 2009, but after 2009 is higher than 1. The company have risk to pay but they will have risk to earn more. It means there have some debts can put company's business at risk at the same time the risk give the profit is good too. But the ratio in the Urban Construction is increasing but not so much. It is still good signal to the company.

4.4 Activity ratio of Urban Construction

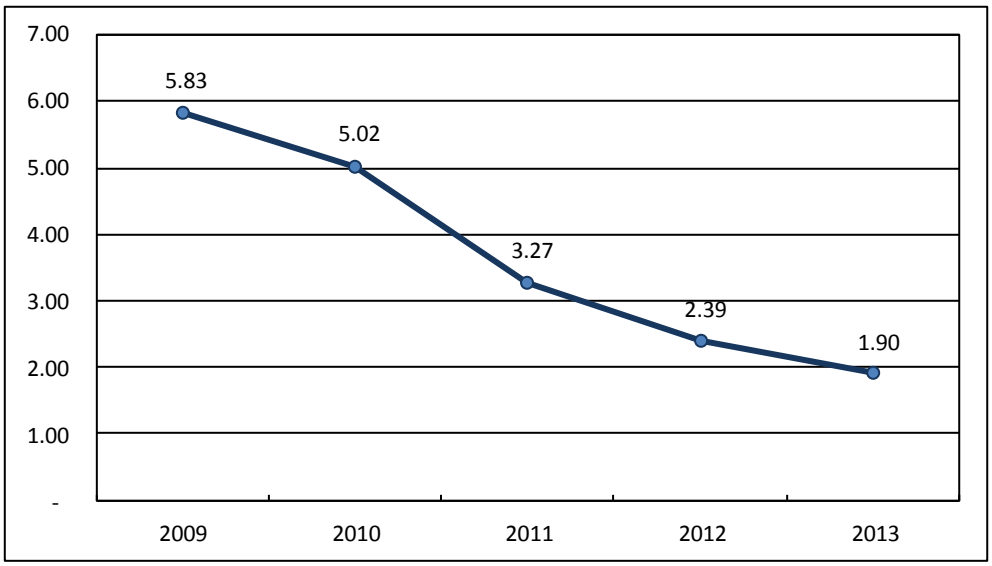
In this part, we use activity ratio to analyze the company. Activity ratio inventory is include three basic ratio. It is receivable turnover, inventory turnover and total assets turnover. They can measure how efficiency Urban Construction uses its assets. Results of turnovers are showed in Tab 4.4. The function for receivable turnover we can find in (2.22). The function for inventory turnover can be found in (2.23). And the function for total assets turnover can be found in (2.24).

Tab.4.4. Activity ratio of Urban Construction from 2009 to 2013.. (%)

	2009	2010	2011	2012	2013
receivable turnover	5.83	5.02	3.27	2.39	1.90
inventory turnover	1.22	0.96	0.71	0.66	1.26
total assets turnover	0.53	0.47	0.40	0.39	0.54

Receivables turnover ratio measure the collection and efficient credit of a company. If a company have high receivables turnover ratio could indicate that the company's collection or credit policies are too stringent. It means the possibility of sales being lost to competitors offering more lenient terms.

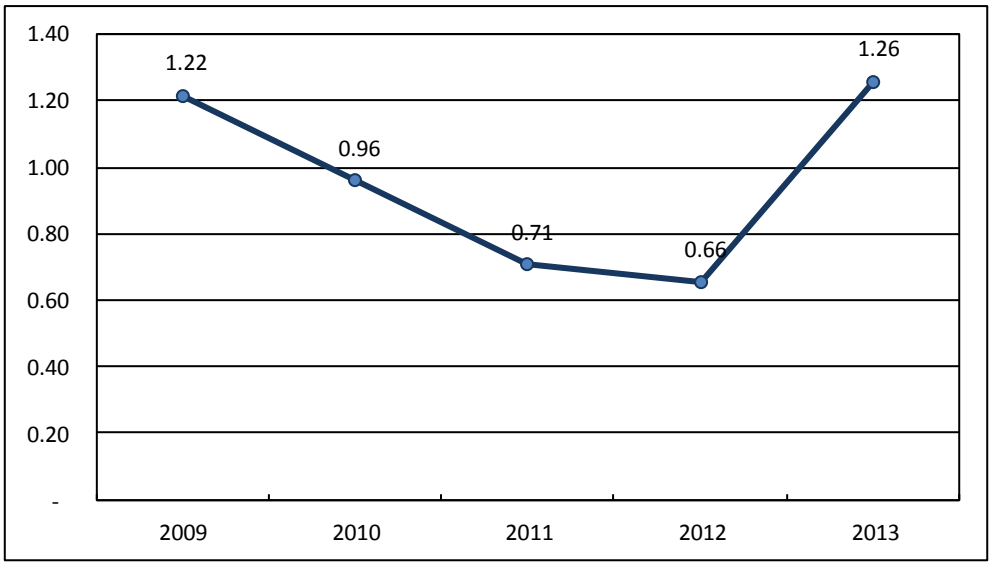
Chart.4.9 Receivable turnover ratio of Urban Construction from 2009 to 2013.



From Chart 4.9 we can find from 2009 to 2013, the ratio is decreased from 5.83% to 1.90%. The main reason is the decreasing of average receivables is lower than total revenue. In 2009 to 2010 the ratio is higher than 4, it means during this period, the Urban Construction can get their receivables immediately, it will reduce bad debt losses. From 2010 to 2012, the ratio is decreased from 5.02% to 1.90%. The main reason is the increasing of average receivables is higher than total revenue. Because more and more fierce competition, forced the company to sale their product. So receivables will be increased. Then the receivable turnover ratio should be around 4 in a company, so the ratios in Urban Construction are not so good in recent 3 years.

The inventory turnover (ITR) give a measure of how quickly a firm can sell their goods. Inventory is the least liquid current assets because it is the goods which haven't been sold. From the Tab.4.4 we can find important information then we make Chart 4.11 for show the inventory turnover ratio.

Chart 4.10 Inventory turnover ratio of Urban Construction from 2009 to 2013.

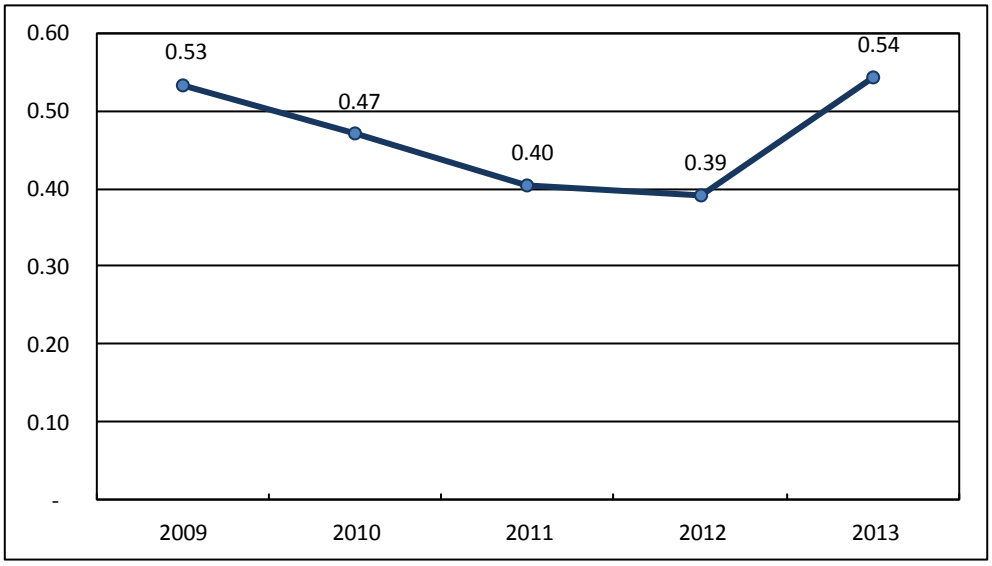


From this chart we can find in 2009 the inventory turnover is 1.22%; it is decreased in 2010, and after 2010 to 2012 is decreasing. We find the average inventory is increasing from 2009 to 2012. Especially in 2012 the average inventory achieve 3.36 million. But at the same time the cost of goods is increasing but is increasing slower than average inventory. Because in 2009, the company start to build a big bridge for the city, the Urban Construction decides to

increase inventories. This is because recent year the bridge business make the company have more and more inventory to purchase and use. And in 2012 to 2013 the inventory is increasing slower than cost of goods, with the new bridge been finished and the now policy about new raw material they need to cost more money for it. In general, if the inventory turnover ratio can be larger, it is good for the company. So in Urban Construction the ratio is around 1, the ratio compared with the same industry is low.

Total asset turnover ratio measures the balance of the revenue and assets of the company. It is mean the company's overall ability to generate revenues with a given level of assets. We can use the important result from Tab 4.4 to make this new Chart 4.13.

Chart.4.13 Total assets turnover ratio of Urban Construction from 2009 to 2013.



From this chart we can find the ratio is from 0.54 to 0.39, the total assets turnover ratios change in a little range around 0.2. It means the company can get the 0.2 RMB of revenues with 1 RMB assets being used. It is very stable but it is very low for the developing company. Urban Construction is a building engineering company with a large scale which is focused on long-term business. Within a whole business period, its inventory turnover seems to be low. From 2012 to 2013 the total assets turnover is increasing from 0.39 to 0.54, the main reason is the total assets are increased slower than total revenue. But in 2012 to 2013 the total assets turnover change from the lowest 0.39 to the highest 0.54. The main reason is with the bridge finish. The company start to get their project payment. This is the reason why at the

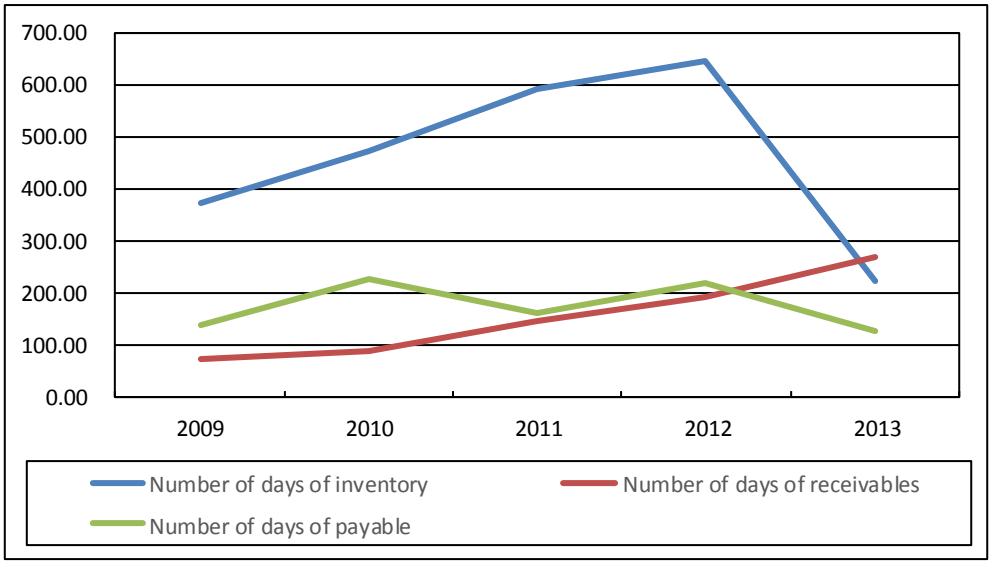
finished time they will achieve the lowest ratio 0.39, but after they finish they will got the highest ratio. This ratio can measure company's efficiency in asset management. It means the higher the ratio show that higher efficiency of using assets. But in Urban Construction, this ratio is low, so it's bad signal for the company.

Days of turnover were another way to analyze the company's activity ratios. Day of turnover always calculates the time how long the company will taste to finish a financial cycle. It can be divided into three parts which is number of days of inventory, number of days of receivable and number of days of parables. For calculation, we need to use (2.25), (2.26) and (2.27). The results are shown in Tab. 4.5. We use the result make Chart 4.14 for easy to analyze.

Tab.4.5 Days of turnover ratio of Urban Construction from 2009 to 2013.

	2009	2010	2011	2012	2013
Number of day's of inventory	372.56	474.54	592.37	645.79	221.09
Number of day's of receivables	72.25	87.53	143.06	192.49	267.61
Number of day's of payable	135.60	226.55	161.62	218.50	127.38

Chart.4.14 Days of turnover ratio of Urban Construction from 2009 to 2013.



From the Tab.4.5 we can find how long the financial cycle is. In 2009 the number of days of inventory is 372.56 days means that the company can turnover its entire inventory in 373 days within one year. It was about almost 1 times per year. From 2009 to 2012 is

number is increasing from 372.56 to 645.79. The main reason is the company doing the building about the city new bridge. They need more inventory for it. Especially when they got the new policy news about from 2013 they need to purchase new better and safety raw material. So they start to buy inventory for this year need because it can still cost less money than new raw material. In 2013 the inventory decrease and the cost of good per day still increasing. So the number decrease because they finish the work they do not need to purchase so much money for inventory. But the new raw material because expensive. This is the reason why the cost of goods increase. And the number of days of receivables is 72.25 days. It means the company can cover its receivable in 73 days by total revenues in this year. It was about 5 times per year. The number is increasing from 72.25 to 267.61 in the period from 2009 to 2013. The main reason is they finish their work and start to get their money from the building. And the number of days of payable is 135.6 days. It means it must take 136 days to pay off the payable. It was about 3 times per year. The number is around 200 and it is really stable. We can explain this all number in easy way is it can be paid off in 2009. All these days should be compared with the number of days of a year were usually 365 days. If the days short than 365, it means the activity can be finished within 1 year. If the days longer than 365, the project cannot be finished within 1 year. And the days shorter is better for the company.

From the chart above, even though the number of days of inventory was longer than 365 days from 2009 to 2012. But the days were decreasing and from the year 2013 on they were shorter than 365. Number of days of receivable was lower than 365. But in these 5 years with a little increasing. Number of days of payable was stable and always lower than 365.

4.5 DuPont analysis of Urban Construction

In this part, we will use DuPont analysis to analyze Urban Construction's profit level. For calculation we will use (2.28), (2.29) and (2.30) to decompose return on equity. Then we can find the value of return on equity, net profit margin, assets turnover, financial leverage, tax burden, interest burden and EBIT margin in Tab 4.6.

Tab.4.6 The value of each items in decomposition of Urban Construction.

	2009	2010	2011	2012	2013
return on equity	0.0993	0.0973	0.0845	0.0787	0.0849
net profit margin	0.0937	0.0820	0.0701	0.0546	0.0381
total assets turnover	0.5342	0.4701	0.4045	0.3916	0.5435
financial leverage	1.9843	2.5238	2.9832	3.6789	4.1004
tax burden	0.8456	0.9305	0.8484	0.8367	0.8804
interest burden	0.9570	0.9975	0.9514	0.7069	0.9692
EBIT margin	0.1158	0.0883	0.0868	0.0924	0.0446

Tab. 4.7 Absolute change of each item in decomposition of Urban Construction.

	2009/2010	2010/2011	2011/2012	2012/2013
return on equity	-0.0020	-0.0128	-0.0058	0.0062
net profit margin	-0.0117	-0.0120	-0.0154	-0.0165
total assets turnover	-0.0641	-0.0656	-0.0129	0.1519
financial leverage	0.5395	0.4593	0.6957	0.4215
tax burden	0.0849	-0.0821	-0.0116	0.0437
interest burden	0.0405	-0.0461	-0.2445	0.2624
EBIT margin	-0.0274	-0.0016	0.0056	-0.0477

We will analyze the influence of the change of component ratio gradually change in the basic rate by gradual changes method. The gradual changes can easy to show the changes in the basic ratio due to the change in the component ratio. ROE are basic ratios and net profit margin, assets turnover, financial leverage are the component ratio for ROE. And net profit margin are the basic ratio for tax burden, interest burden and EBIT margin. We will show the method of gradual changes in Tab 4.8 in 2008 and 2010.

Tab. 4.8 Gradual changes of ROE of Urban Construction between 2009 and 2010.

	2010	2011	2010/2011(Δ a)	Δ Xai	order
net profit margin(a1)	0.0820	0.0701	-0.0120	-0.0142	1
assets turnover(a2)	0.4701	0.4045	-0.0656	-0.0116	3
financial leverage(a3)	2.5238	2.9832	0.4593	0.0130	2
				-0.0128	

For a1: △ROEa1 = -0.0120 · 0.4701 · 2.5238 = -0.0142

For a2: Δ ROEa2 = 0.0701 · -0.0656 · 2.5238 = -0.0116

For a3: Δ ROEa3 = 0.0701 · 0.4045 · 0.4593 = 0.0130

We can find the sum of gradual changes is the equal to change of ROE (-0.0020) between 2009 and 2010 Then we can see the gradual changes of net profit margin, total assets turnover and financial leverage between 2010 and 2011, 2011 and 2012, 2012 and 2013 in Tab.4.9, Tab.4.10 and Tab. 4.11.

Tab. 4.9 Gradual changes of ROE of Urban Construction between 2010 and 2011.

	2011	2012	2011/2012(Δ a)	Δ Xai	order
net profit margin(a1)	0.0701	0.0546	-0.0154	-0.0186	1
assets turnover(a2)	0.4045	0.3916	-0.0129	-0.0021	3
financial leverage(a3)	2.9832	3.6789	0.6957	0.0149	2
				-0.0058	

For a1: △ROEa1 = -0.0120· 0.4701· 2.5238 = -0.0142

For a2: Δ ROEa2 = 0.0701· -0.0656· 2.5238 = -0.0116

For a3: Δ ROEa3 = 0.0701· 0.4045· 0.4593 = 0.0130

We can find the sum of gradual changes is the equal to change of ROE (-0.0128) between 2010 and 2011.

Tab. 4.10 Gradual changes of ROE of Urban Construction between 2011 and 2012.

	2011	2012	2011/2012(Δ a)	Δ Xai	order
net profit margin(a1)	0.0701	0.0546	-0.0154	-0.0186	1
assets turnover(a2)	0.4045	0.3916	-0.0129	-0.0021	3
financial leverage(a3)	2.9832	3.6789	0.6957	0.0149	2
				-0.0058	

For a1: △ROEa1 = -0.0154· 0.4045· 2.9832 = -0.0186

For a2: Δ ROEa2 = 0.0546· -0.0129· 2.9832 = -0.0021

For a3: Δ ROEa3 = 0.0546· 0.3916· 0.6957 = 0.0149

We can find the sum of gradual changes is the equal to change of ROE (-0.0058) between 2011 and 2012.

Tab. 4.11 Gradual changes of ROE of Urban Construction between 2012 and 2013.

	2012	2013	2012/2013(Δ a)	Δ Xai	order
net profit margin(a1)	0.0546	0.0381	-0.0165	-0.0238	1
assets turnover(a2)	0.3916	0.5435	-0.1519	0.0213	2
financial leverage(a3)	3.6789	4.1004	0.4215	0.0087	3
				0.0062	

For a1: Δ ROEa1 = -0.0165· 0.3916· 3.6789 = -0.0238

For a2: Δ ROEa2 =0.0381· -0.1519· 3.6789 = 0.0213

For a3: Δ ROEa3 = 0.0381· 0.5435· 0.4215 = 0.0087

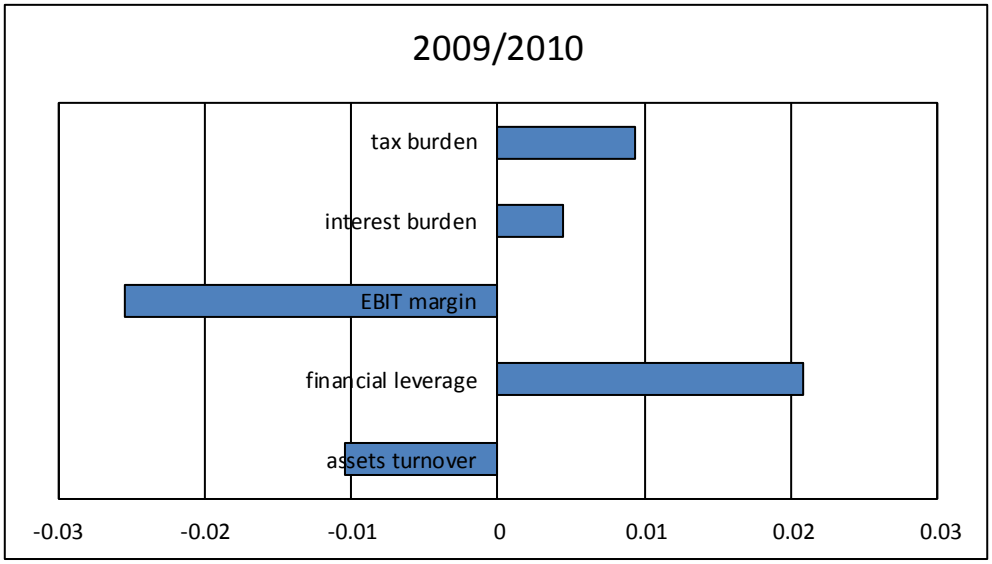
We can find the sum of gradual changes is equal to change of ROE (0.0062) between 2012 and 2013. Then we can see other Δ Xai from 2009 to 2013 in Tab. 4.12 and the other Δ Xai sum is equal to the change of net profit margin.

Tab. 4.13 Gradual changes of each item from 2009 to 2013.

	2009/2010	20110/2011	2011/2012	2012/2013
net profit margin	-0.0124	-0.0142	-0.0186	-0.0238
assets turnover	-0.0104	-0.0116	-0.0021	0.0213
financial leverage	0.0208	0.0130	0.0149	0.0087
SUM	-0.0020	-0.0128	-0.0058	0.0062
tax burden	0.0094	-0.0072	-0.0010	0.0029
interest burden	0.0044	-0.0035	-0.0178	0.0213
EBIT margin	-0.0254	-0.0013	0.0033	-0.0407
SUM	-0.0117	-0.0120	-0.0154	-0.0165

So we can compare these data to analyze the Urban Construction's profit leverage. We will analyze four period which is 2009 to 2010, 2010 to 2011, 2011 to 2012 and 2012 to 2013. We can make this Chart.4.15, Chart.4.16, Chart.4.17 and Chart.4.18.

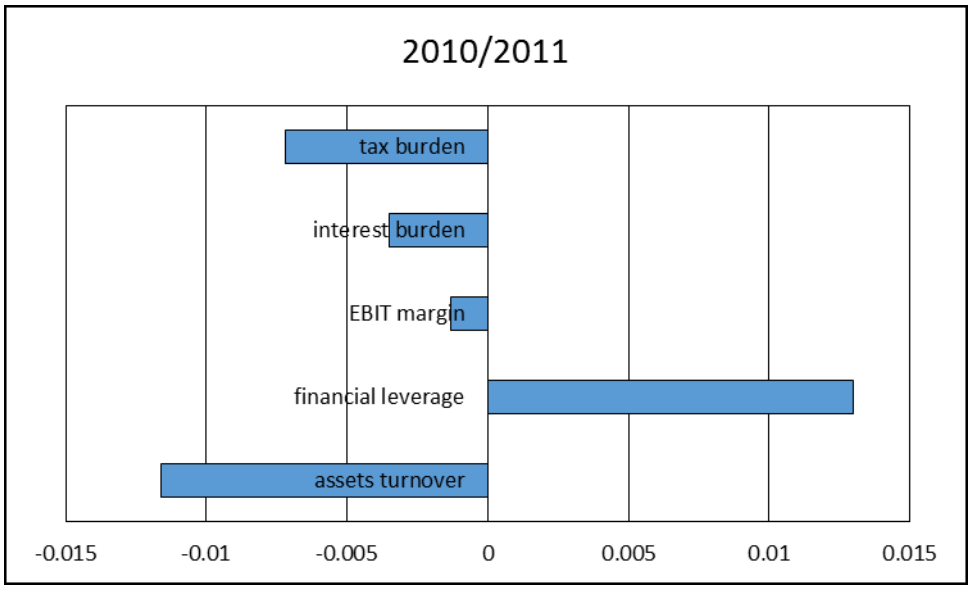
Chart 4.15 Influence of each item between 2009 and 2010.



From Chart 4.15 we can find between 2009 and 2010 the most important number is EBIT margin. It have the most influence to the basic ratio. The EBIT margin is negative. The number of EBIT margin is -0.0254. And it is the minimum number in decomposition. We know about EBIT margin is calculate by EBIT and revenue. From the income statement we can find in 2009 to 2010 the EBIT is decreased. At the same period the revenue is increased. This is the reason the EBIT margin is decreased. And we can find another negative number is the ΔXai of total assets turnover. The number is -0.0104. The total assets turnover is calculate

by assets is revenue and total assets. We can find the revenue and total assets are increasing at the same time. But the revenue is increasing slower than total assets increasing speed. This is the main reason the ΔXai of total assets turnover is decreased. And at that year the Urban Construction just got the new business with build the new bridge. They need more money to purchase the inventory and the company earn the long-term revenue. That the reason why their revenue increase lower than total assets. Base on the principle of DuPont analysis, Urban Construction need to improve the ΔXai of EBIT margin and total assets turnover to increase the changes of ROE.

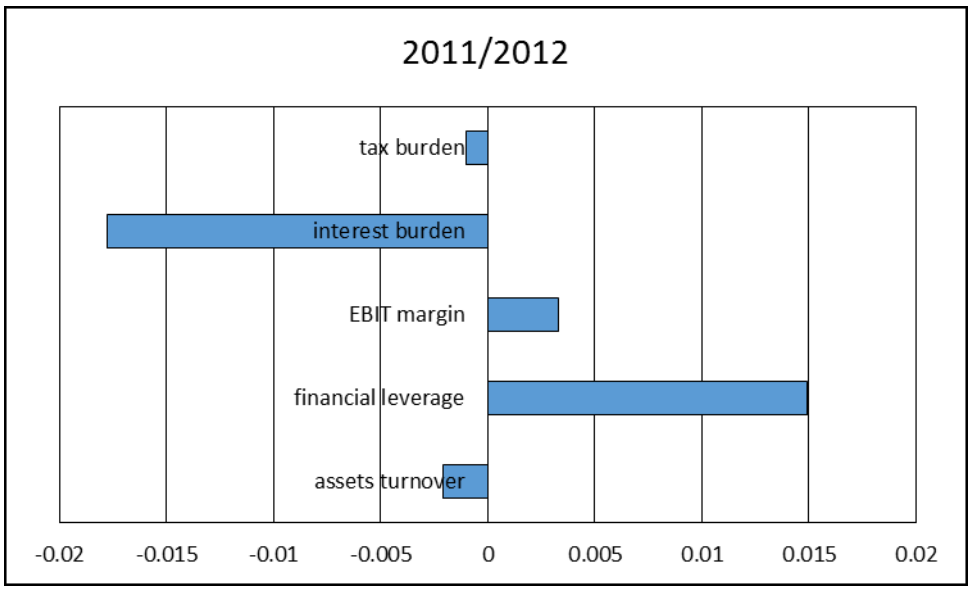
Chart 4.16 Influence of each item between 2010 and 2011.



From Chart 4.16 we can find between 2010 and 2011 the smallest ΔXai is the ΔXai of total assets turnover. The ΔXai of total assets turnover is negative and the number of total assets turnover is -0.0021. We know about total assets turnover is calculate by revenue and total assets. From the income statement we can find in 2010 to 2011 the revenue is increased. At the same period the total assets is increased also. But the main reason the ΔXai of total assets turnover got the negative number is the revenue increasing speed is slower than total assets. And there have another negative number is the ΔXai of tax burden. The number of ΔXai of tax burden is -0.0010. And it is the minimum number in decomposition. The tax burden net income and EBT. We can find the net income is increased. At the same time the EBT decreased. This is because the new Chinese policy for the construction company start to

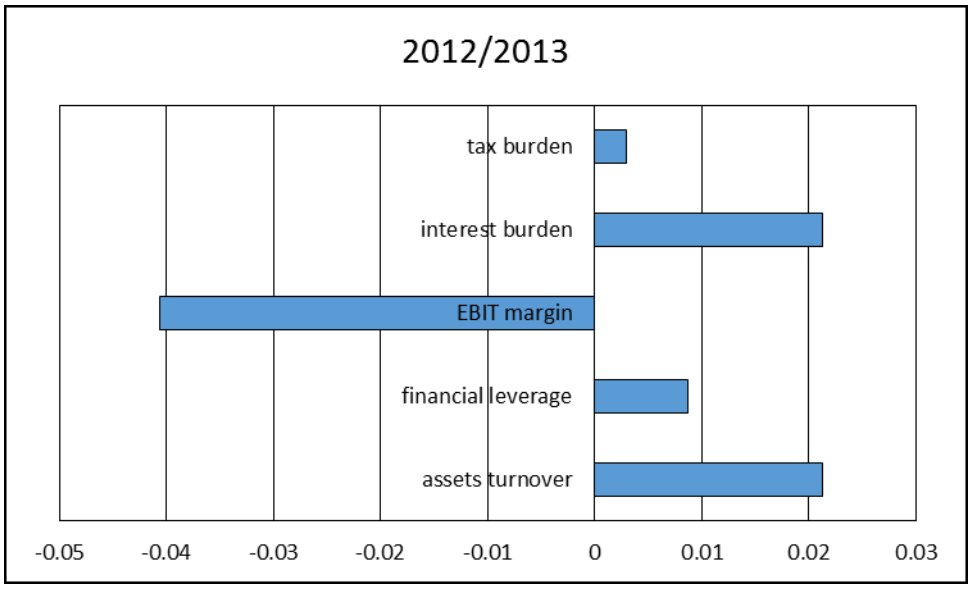
take more taxes from their income. So this is the reason why two years the EBT decrease but the net income increased. Base on the principle of DuPont analysis, Urban Construction need to increase the ΔXai of total assets turnover and tax burden to improve the changes of ROE.

Chart 4.17 Influence of each item between 2011 and 2012.



From Chart 4.17 we can find between 2011 and 2012, the Δ Xai of interest burden is negative and the number is -0.0178. It is the minimum number in decomposition. Interest burden should to use EBT and EBIT, because the EBT is decreased from 2011 to 2012, the main reason is the interest increased for all the construction company. But the EBIT is increasing for reason because the company is always got profit. And the second smallest number is the Δ Xai of total assets turnover. The reason is same like 2010 to 2011. The revenue and total assets are increasing in different speed. The total assets is increasing faster.so the number of the Δ Xai of total assets turnover is negative. According to the principle of the gradual changes in DuPont analysis, Urban Construction should increase the Δ Xai of interest burden and total assets turnover to improve the change of ROE.

Chart 4.18 Influence of each item between 2012 and 2013.



From Chart 4.18, between 2012 and 2013, we can find the ΔXai of EBIT margin is the smallest. It is negative and the number is -0.0407, the minimum number in decomposition. EBIT margin calculate by EBIT and revenues. Because the EBIT is decreased. So the EBIT margin is decreased. At the same time the revenue is increased. This is the main reason the number of the ΔXai of EBIT margin is so small. The EBIT is decreased does not mean the company earn less than last year. The EBIT is the profit before the interest and tax. After the tax and interest the net profit is still higher than last year. This is because the taxes and the interest have the different ratio for different level of profit. If the company EBIT is so high the tax and the interest will be high as well. So better find the balance with the interest and tax. Base on the principle of the gradual changes in DuPont analysis, Urban Construction should increase the ΔXai of EBIT margin to improve the ΔXai of net profit margin, and then to improve the change of ROE.

4.6 Summary

In this part, we will have results for make financial analysis from four parts: liquidity ratios, activity ratios, solvency ratios and profitability ratios. Financial analysis can represent company's economic behavior by different way. In other words, when a company has an unusual data. It will be showed in every analysis if it is more or less.

For profitability ratios, the operating margin, net profit margin and return on assets are decreasing from 2009 to 2013. They are decreased from 11.58% to 4.46%, from 9.37% to 3.81% and from 5.00% to 2.07% respectively. The main reason is the operating expenses increasing faster than the revenue and assets increasing speed. It means maybe Urban Construction's profitability will decrease in the future, because the fiercer market competition.

And based on the principle of the gradual changes in DuPont analysis, at 2009 to 2010 the Δ Xai of EBIT margin need to increase to improve net profit margin. And the total assets turnover need to be improve for ROE. At 2010 to 2011 the Δ Xai of tax burden and total assets turnover need to be improve for ROE. At 2011 to 2012 the Δ Xai of the interest burden need to be increased for increased the net profit margin. And the company need to increase the Δ Xai of total assets margin for increase ROE. And the recent two years 2012 to 2013 the Δ Xai of EBIT margin need to be increased. After analyze we can got conclusion is the company should increase the Δ Xai of EBIT and total assets turnover in the future for increase the ROE.

For liquidity ratios, the current ratio, quick ratio and cash ratio does not have the similar ratio. They are decreased from 2009 to 2013 at the recent year. But they have different trend. From 2009 to 2012, both of this three ratio are decrease. Because the Urban Construction has a big business in that period. Only the current ratio from 2011to 2012 increased a little. Because the assets were increased. Then this three ratio start to have a big change from 2012 to 2013. The current ratio is decrease a lot from 9.24% to 4.46%. The quick ratio and cash ratio increase a lot from 0.50% to 0.76% and from 0.13% to 0.18%. That is because of the project finished. But the company make a business about long-term business.

So the liquidity is not the most part for company to finance their money. So Urban Construction's liquidity maybe is not very well in the future. But it will not make affect for the company's development.

For the solvency ratios, the debt ratio and the debt-to-equity are increasing from 2009 to 2011. But still keep in really low ratio. Because current liabilities are increased. Although the ratio is not in the perfect range, it is good signal for Urban Construction in the future. So the solvency of Urban Construction maybe is good in the future. It has ability to pay its liabilities.

For activity ratios, we have two way to analyze it. The first is turnovers. The second is days. From 2009 to 2012, receivable turnover inventory turnover and total assets turnover are decreased. Because the market have more fierce competition, compel the company to make business, so credit sales as the main way to expand sales. And the total assets turnover is lower than 0.5 from 2010 to 2012, it's low of the ratio. Day's sales of inventory and days of sales of payable become more and more between 2009 and 2013. And the receivable is stable but it is increasing. So it's not good to Urban Construction in the future and the assets maybe are not used efficiently in the future.

In conclusion, Urban Construction's is a developed company placing emphases on long-term business. And in a stable and positive financial situation.

5 CONCLUSION

Financial analysis is really important in the economic and financial system. It is because the financial analysis can help the company or the manager avoid the uncertainty from the wrong decision. And financial analysis is easy to do because it have a most basic function is use a mount of data, after calculate and analyze we will get result about the historical data then we can find the future trend.

The goal of this thesis was analyze financial health of Urban Construction from 2009 to 2013. And we focus on financial analysis to analyze the Urban Construction Company in recent 5 years. The recent 5 year in this thesis is from 2009 to 2013. And this thesis use two methods which are common-size analysis and financial ratio analysis. This thesis was divided by 5 parts. First chapter and last chapter was introduction and conclusion about whole this thesis. Second chapter was description of the financial analysis. Third chapter was introduction of Urban Construction company. Fourth chapter was all calculations and analysis. Last chapter will be conclusion.

In chapter two, we described the financial statement and the financial analysis methods. The financial statement include the balance sheet, the income statement and the cash flow statement. Then we introduced common-size analysis. The common-size analysis include two methods. The first one was vertical common-size analysis and the second one was horizontal common-size analysis. After this we introduced the most important analysis methods is four basic financial ratio. The financial ratio include profitability ratios, liquidity ratio, solvency ratio and activity ratio. Than we have DuPont analysis at the end.

In chapter three, first we described about our company. About Urban Construction Company's history, competitor and risk and business market. Second we used common-size analysis to calculate the Urban Construction from 2009 to 2013. we used two methods which is vertical common-size analysis and horizontal common-size analysis.

In chapter four, we do the most calculation. First we use profitability ratio to find the recent years profitability of Urban Construction. Second we use liquidity ratio to count the liquidity of Urban Construction. Third we use solvency ratio got the Urban Construction Company's payment ability. Fourth we use activity ratio to calculate how long will be the Urban Construction Company's financial cycle. Then we use DuPont analysis to find which part is the Urban Construction need to improve for increase the ROE.

After calculation and analysis we got the financial situation of the Urban Construction Company. From profitability ratio analysis we can got the from 2009 to 2013 all three ratio OPM, ROA and ROE is decreasing. But from long-term we can find in 2013 every ratio decreasing speed start to be slower. So it means the company start to improve their profitability. And liquidity ratio the current ratio, quick ratio and cash ratio all in decreasing from 2009. But only current ratio in 2011 increase from 1.53 to 1.61. And all this three ratio increase at the same time at 2013. It is because the the company finally finish the big business with government. The company start to earn money now. And the solvency ratio have debt ratio have debt-to-equity ratio analyze the company. We find both of this two ratio is increasing in this 5 years. It is because the company slowly start to payback the debt from the money they earn from the business. And the activity ratio was showing some important information. The receivable turnover is decreasing in this 5 years from 5.83 to 1.91. Because more and more fierce competition is forced the company to sale their product in cheaper price. But the inventory turnover and total assets turnover is increased at the same time at 2013. it is because the finished business give money back to them. At the end from DuPont analysis we got the result is the Urban Construction Company need to improve their total assets and EBIT for increase their ROE. The Urban Construction Company has a stable developing structure and the Urban Construction Company was positive and stable.from financial ratio analysis we can got the Urban Construction Company is doing long-term business. So the company from all side is really stable and the Urban Construction Company will have a good.

BIBLIOGRAPHY

Professional book

[1]. BREALY, R. A., S. C. MYERS and F. ALLEN. P*rinciples of Corporate Finance*. 9th ed. New York: McGraw-Hill, 2008. 978 p. ISBN 978-007126327-6.

[2]. CLAYMAN, M., M. FRIDSON and G. TROUGHTON. *Corporate Finance: A Practical Approach.* Canada: CFA institute, December 2010. 452 p. ISBN 978-0-470-19768-4.

[3]. Ehrhardt, M., Brigham, E. *Corporate Finance: A Focused Approach.* 3rd ed. 2008.131p. ISBN 978-0-324-65568-1.

[4]. HARRISON, W. T., Ch. T. HORNGREN and B. THOMAS. Financial Accounting. 8th ed. New York: Prentice Hall, 2009. 960 p. ISBN 978-0136108863.

[5]. ROSS, Stephen A, Jeffrey F JAFFE a Randolph WESTERFIELD.*Corporate finance*. 4th ed. Chicago: Irwin, c1996, xxiii, 899 s. Irwin series in finance. ISBN 0-256-15229-2.

Electronic documents and others

[6]. The Xinjiang Urban Construction [online]. [08. 4. 2015]. Available on: http://gd.lzt1.com/

[7]. The Xinjiang Urban Construction's annual report [online]. [08. 4. 2014]. Available on:http://www.sse.com.cn/assortment/stock/list/stockdetails/announcement/index.shtml?COMPANY_CODE=600545&static=t

List of Abbreviations

EBIT - Operation profit

EBT - Net profit before taxes

EAT - Net profit

ROA - Return on assets

ROE - Return on equity

GPM - Gross profit margin

IT - Inventory turnover

DSI - Days sales of inventory

RT - Receivable turnover

NODOP - Number of days of payable

FAT - Fixed assets turnover

TAT - Total asset turnover

DTAR - Debt-to-assets ratio

DTER - Debt-to-equity ratio

FCCR - Fixed-charge coverage ratio

CFCR - Cash flow coverage ratio

DSCR - Debt service coverage ratio

QR – Quick ratio

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Maidiya Bahate 麦迪亚·巴哈特

Student´s name and surname

List of Annexes

Annex 1: Complete balance sheet of Urban Construction. (1000RMB)

	2009	2010	2011	2012	2013
CURRENT ASSETS					
Cash and Time deposits	429,752	572,889	413,034	446,974	723,449
Notes receivable	500	1,200	1,400	1,700	1,400
Trade receivables	222,048	325,129	601,980	907,468	2,435,494
Advances to suppliers	75,474	141,066	125,717	102,342	311,785
Dividend Receivable	500	500	2,650	4,050	1,900
Other receivables	97,891	159,286	263,657	573,790	972,725
Inventories	1,265,275	2,090,432	2,821,586	3,906,509	2,408,639
Other current assets	64	75	109	100	19
Total current assets	2,091,502	3,290,577	4,230,133	5,942,934	6,855,411
NON-CURRENT ASSETS					
Held-to-maturity investments	30,305	18,999			
Long-term receivables					546,694
Long-term equity investments	47,414	45,984	46,177	44,251	44,509
Investment properties	70,144	61,082	57,331	53,531	41,635
Fixed assets	520,024	634,725	785,607	745,779	553,622
Construction in progress	214,911	151,956	11,339	32,888	38,138
Intangible assets	28,256	41,099	117,879	118,273	109,813
Goodwill	6,201	6,556	6,556	6,556	6,556
Long-term prepaid expenses		2,615	4,063	3,071	2,502
Deferred tax assets	26,429	56,656	80,191	124,305	227,209
Total non-current assets	943,684	1,019,671	1,109,143	1,128,654	1,570,679
Total assets	3,035,186	4,310,248	5,339,275	7,071,588	8,426,089
CURRENT LIABILITIES					
Short-term borrowings	430,000	600,000	997,000	1,413,000	1,486,000
FL held for trading	415				

Notes payable	228,570	171,440	130,960	244,410	281,876
Accounts payable	187,119	258,110	288,820	495,847	669,956
Advances from customers	133,965	87,862	86,962	265,023	763,231
Employee benefits payable	14,097	17,004	16,366	15,879	25,414
Taxes payable	57,696	86,549	80,753	94,401	67,228
Interest payable					11,367
Dividends payable	376	563	572	582	585
Other payables	29,945	550,879	333,128	565,021	398,457
Current portion of non-current li abilities	41,000	105,480	410,480	214,966	1,075,448
Other non-current liabilities	132,485	268,161	300,268	793,360	1,068,965
Total current liabilities	1,255,668	2,146,047	2,645,309	4,102,487	5,848,527
NON-CURRENT LIABILITIES					
Long-term borrowings	234,380	439,338	836,800	994,348	428,400
Provisions			2,311	987	810
Other non-current liabilities	15,554	16,293	16,034	16,632	60,459
Total non-current liabilities	249,934	455,631	855,145	1,011,967	489,669
Total liabilities	1,505,602	2,601,678	3,500,453	5,114,454	6,338,196
Equity					
Capital Stock	675,786	675,786	675,786	675,786	675,786
Capital surplus	562,038	562,038	562,047	562,047	562,047
appropriative reserve	1,407	2,046	3,148	1,232	1,979
Surplus reserve	61,105	80,601	97,075	119,419	148,188
Undistributed profits	205,942	366,732	476,973	576,562	677,522
Minority interest	23,306	21,367	23,793	22,089	22,371
Total owners’ equity	1,529,584	1,708,570	1,838,822	1,957,135	2,087,893
Total liabilities and equity	3,035,186	4,310,248	5,339,275	7,071,588	8,426,089

Annex 2: Income statement of Urban Construction. (1000RMB)

	2009	2010	2011	2012	2013
Revenue	1 621 290	2 026 991	2 218 923	2 819 658	4 653 124
Cost of goods sold	1 239 592	1 607 895	1 738 564	2 207 965	3 976 383
Selling expenses	23 380	16 487	22 948	17 395	25 383
Surcharges	64 931	91 415	78 320	101 340	119 765
administration expense	65 628	77 063	102 448	112 002	126 970
Depreciation	4 313	13 209	24 214	57 727	111 314
Other expenses	35 778	41 842	59 846	62 826	85 608
OPERATING INCOME	187 669	179 081	192 583	260 404	207 700
Interest expenses and other financial costs	8 074	444	9 363	76 335	6 392
EBT	179 594	178 637	183 220	184 069	201 308
taxes	27 732	12 421	27 784	30 051	24 069
NET INCOME	151 863	166 216	155 437	154 018	177 238